

REF ID: A6460

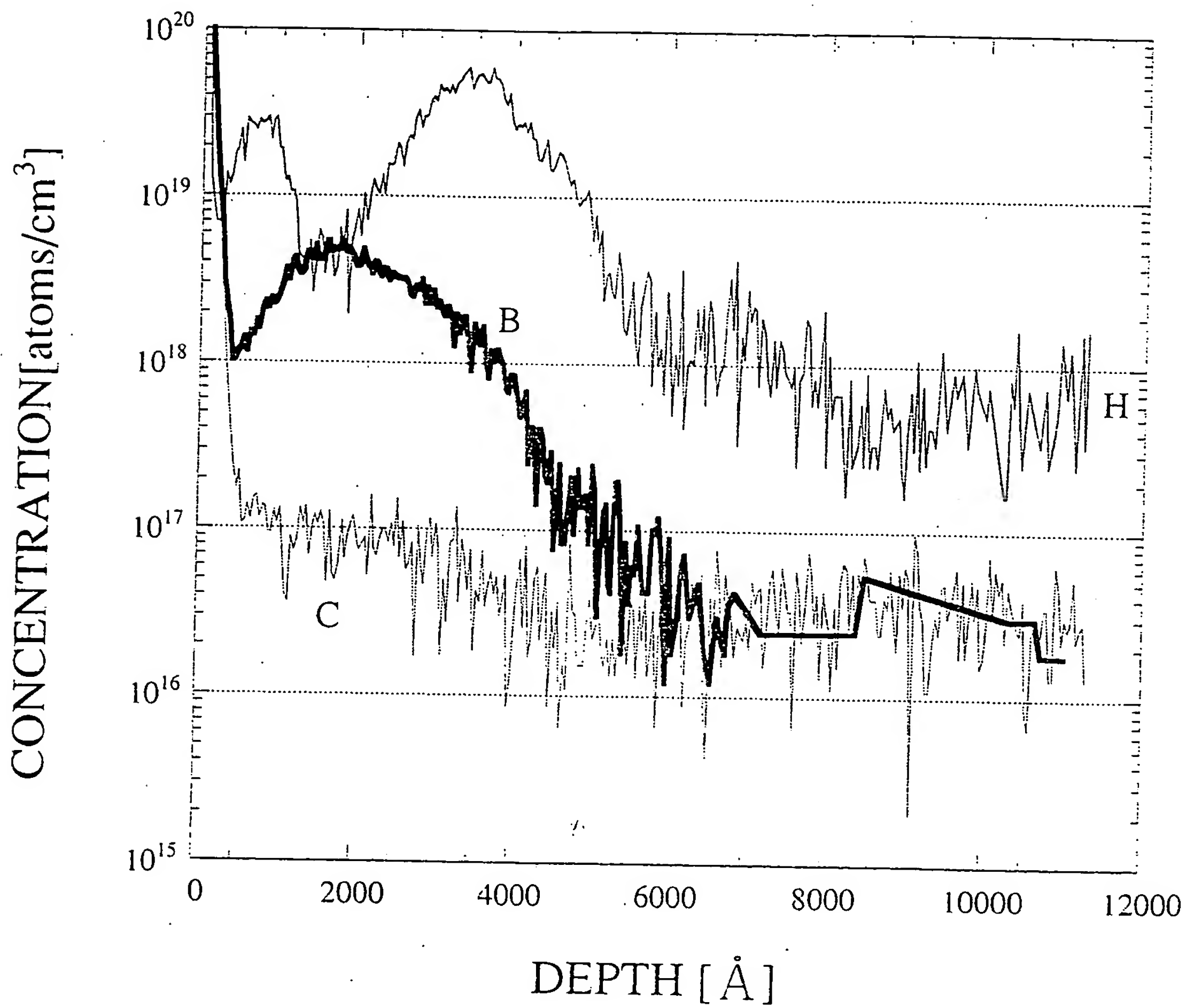


Fig 1

BEST AVAILABLE COPY

103710-149450

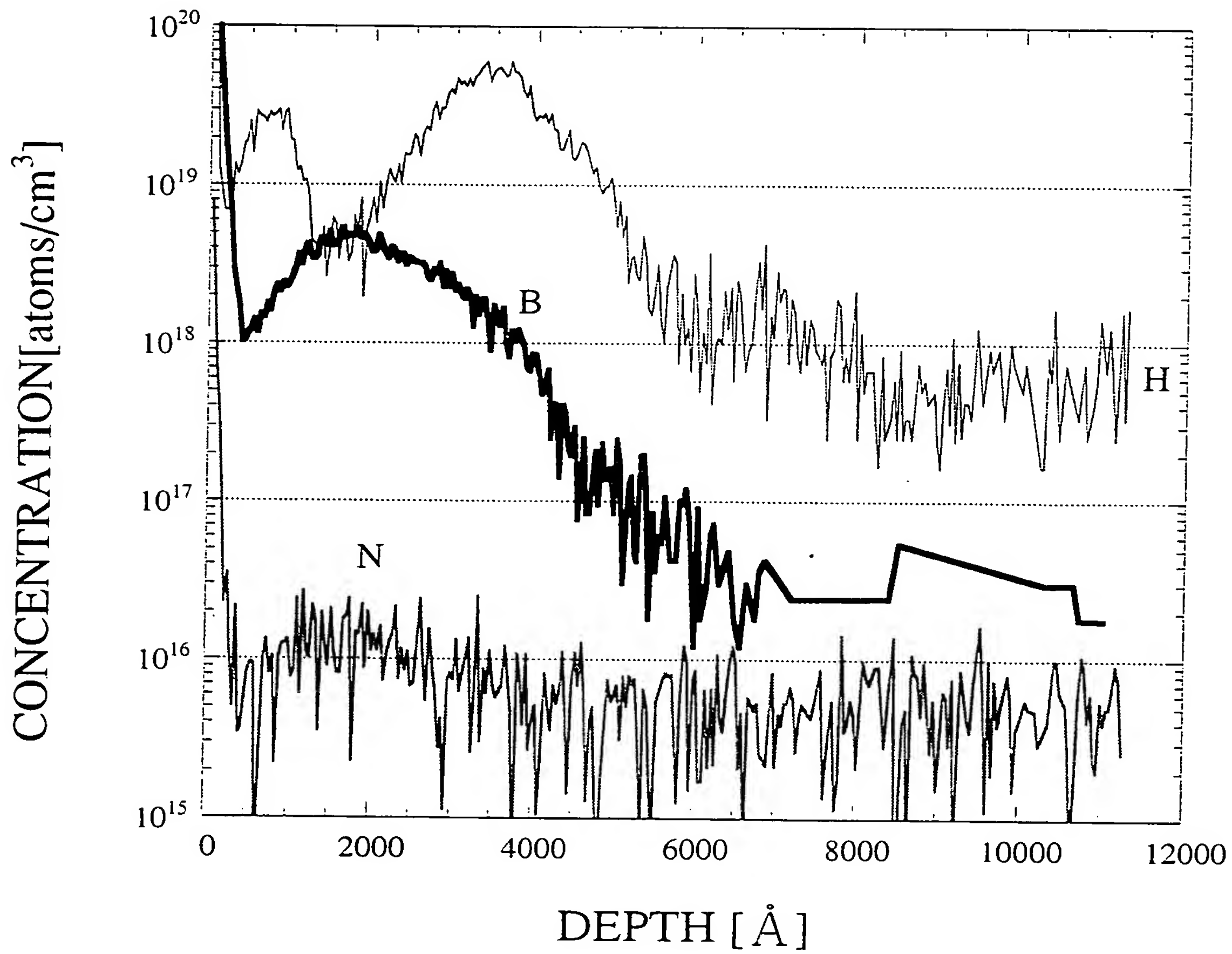


Fig. 2

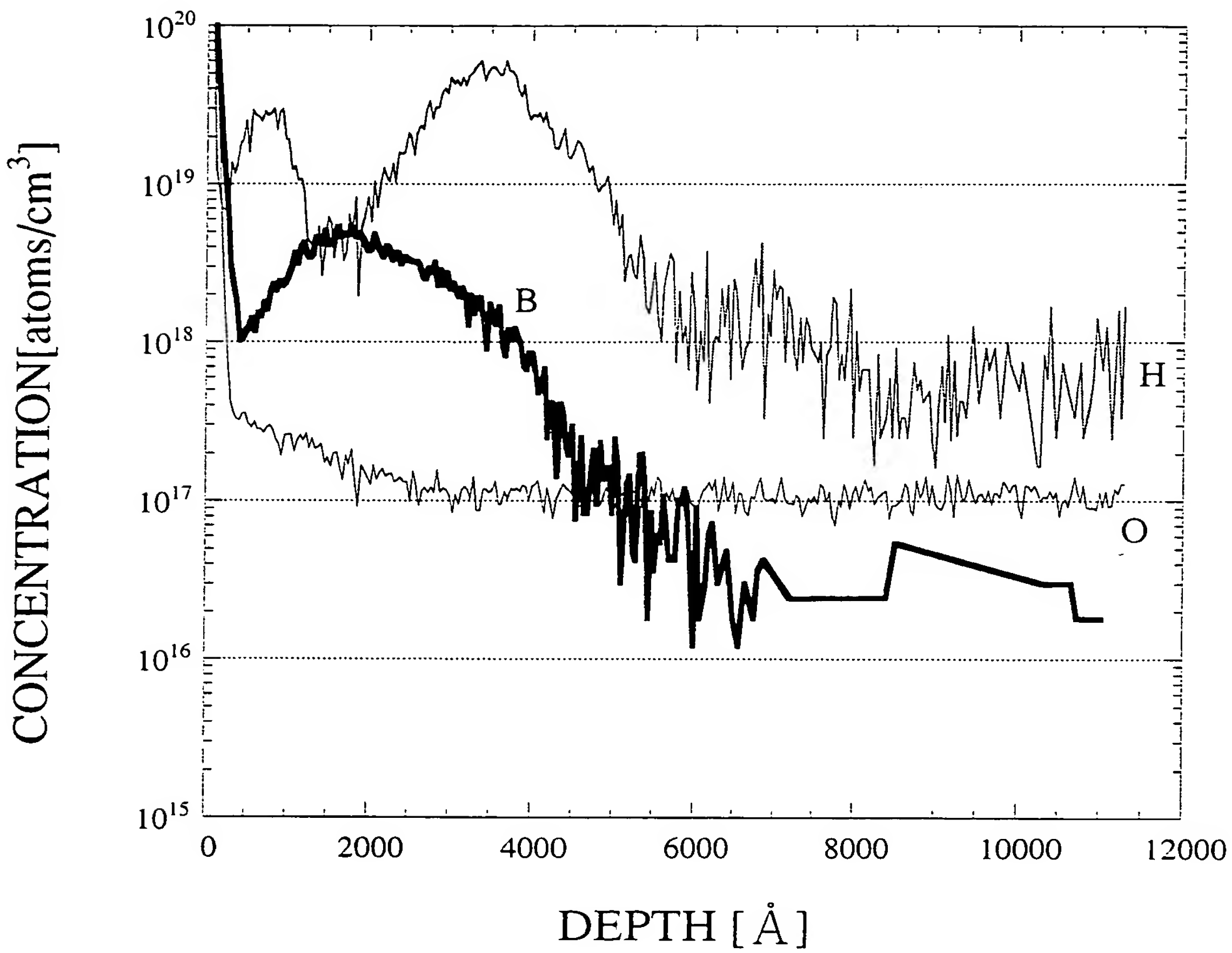


Fig. 3

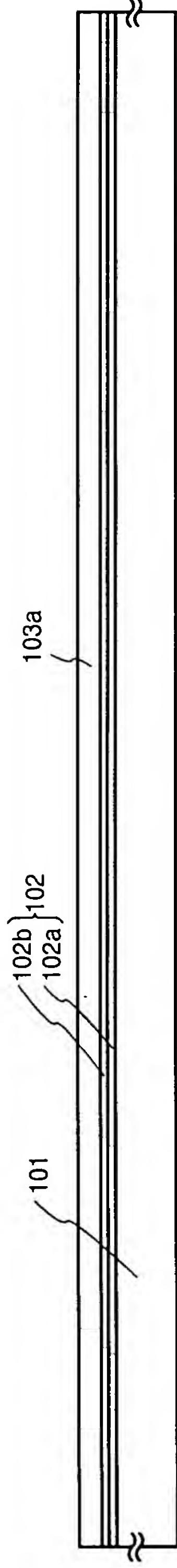


Fig. 4A

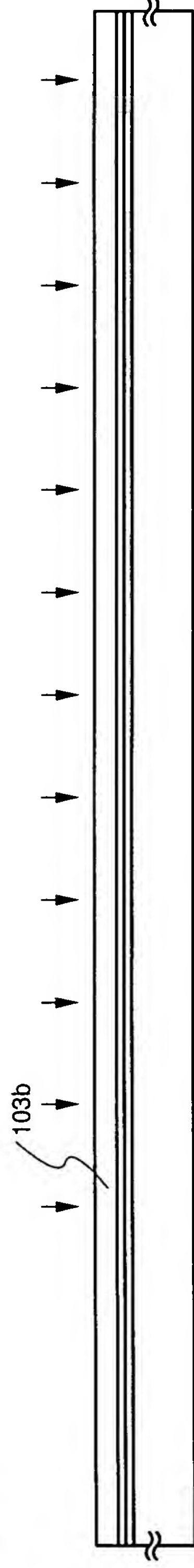


Fig. 4B

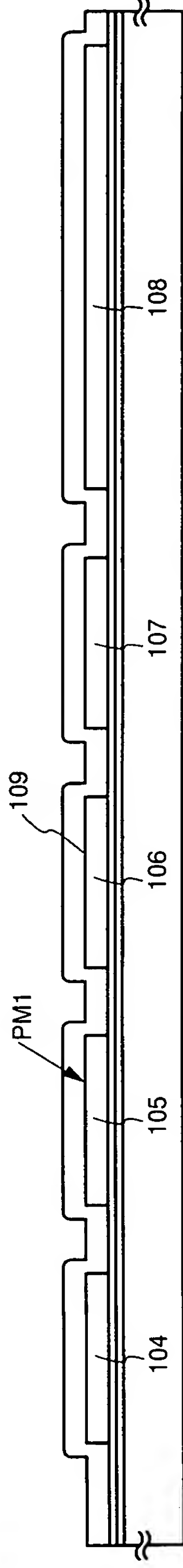


Fig. 4C

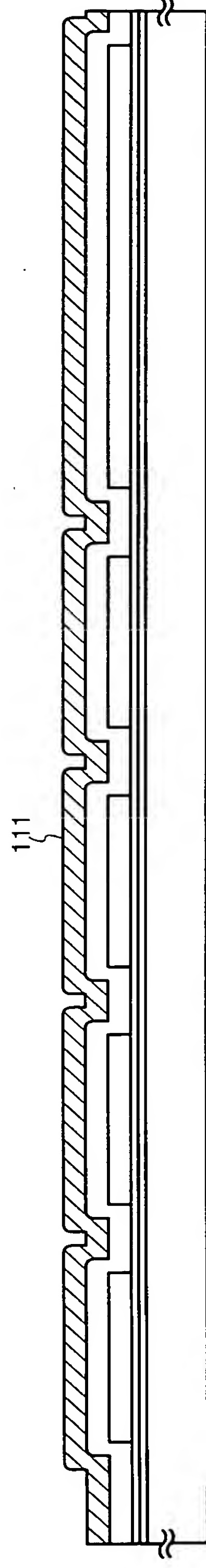


Fig. 4D

Fig. 5A

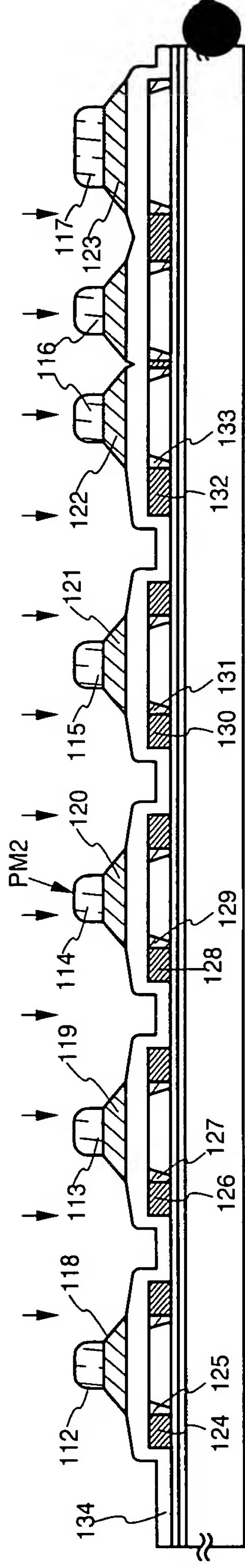


Fig. 5B

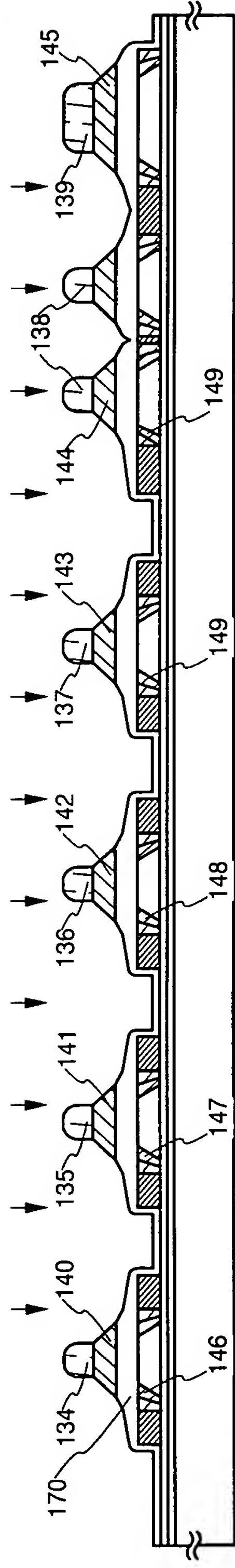
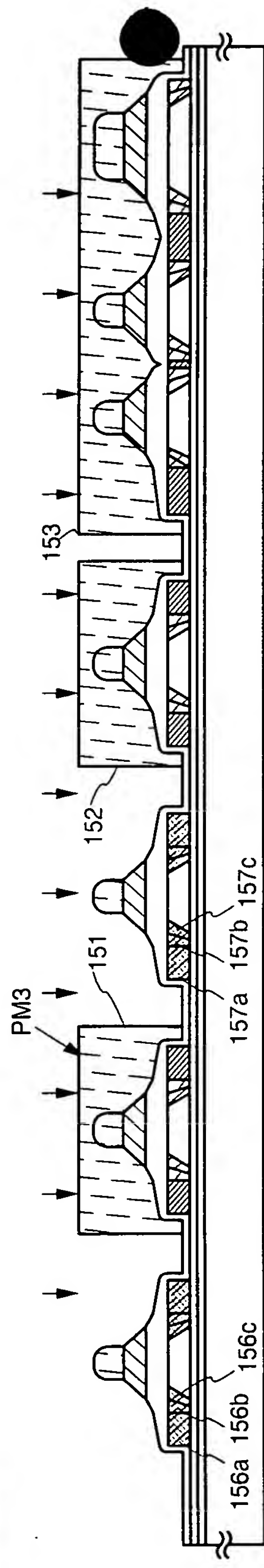


Fig. 5C



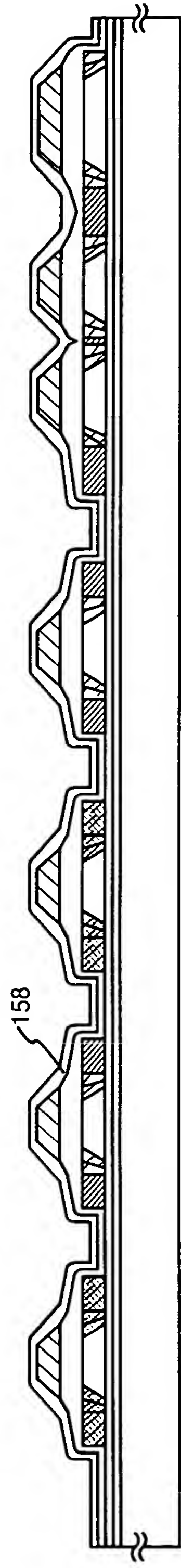


Fig. 6A

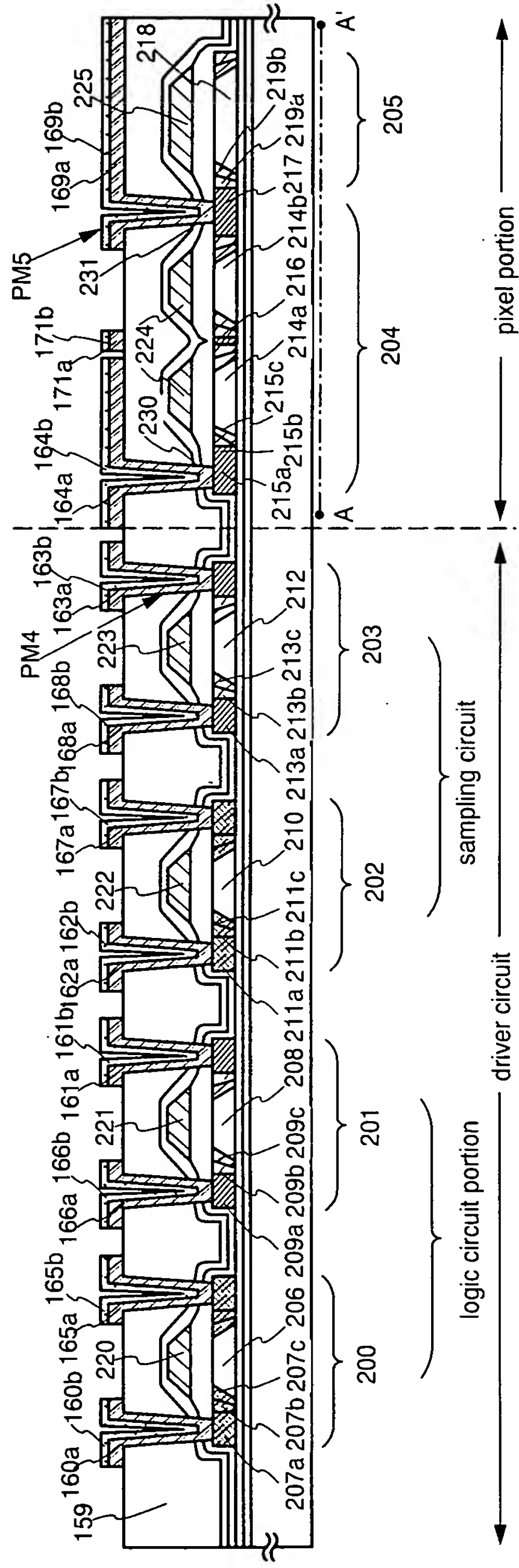


Fig. 6B

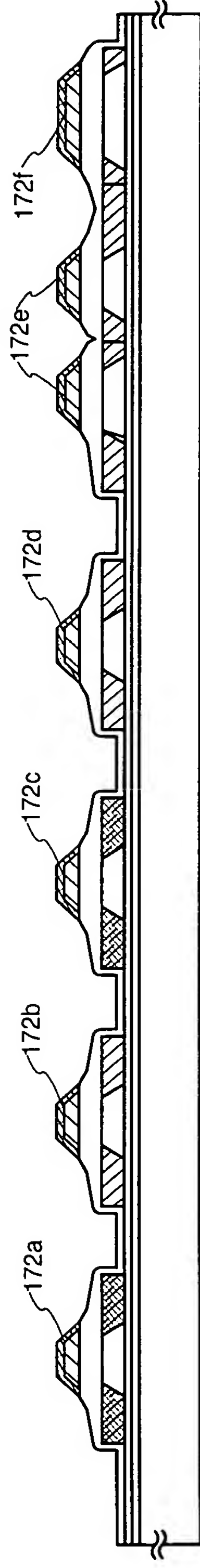
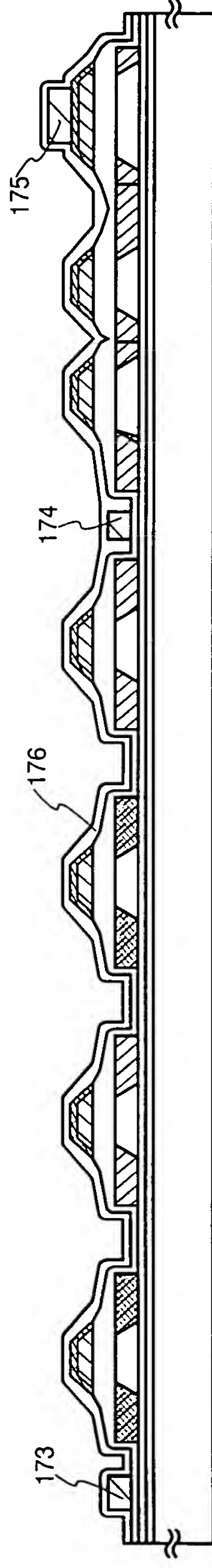


Fig. 7A



**Fig. 7B**

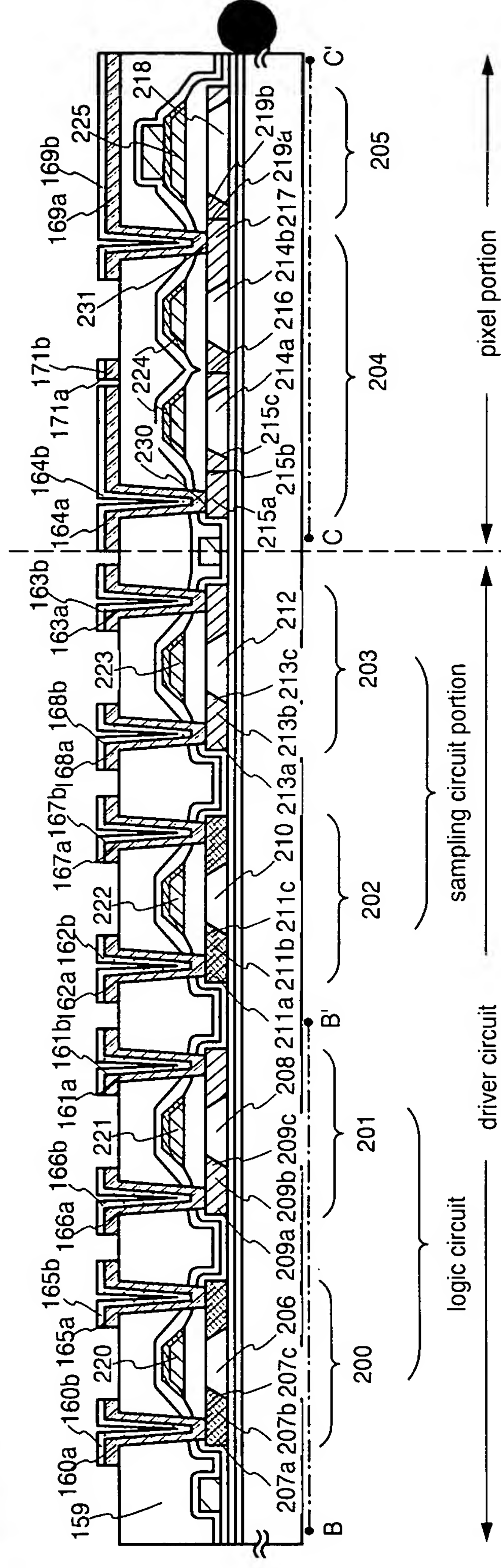


Fig. 7C

FIG. 8A

Fig. 8A

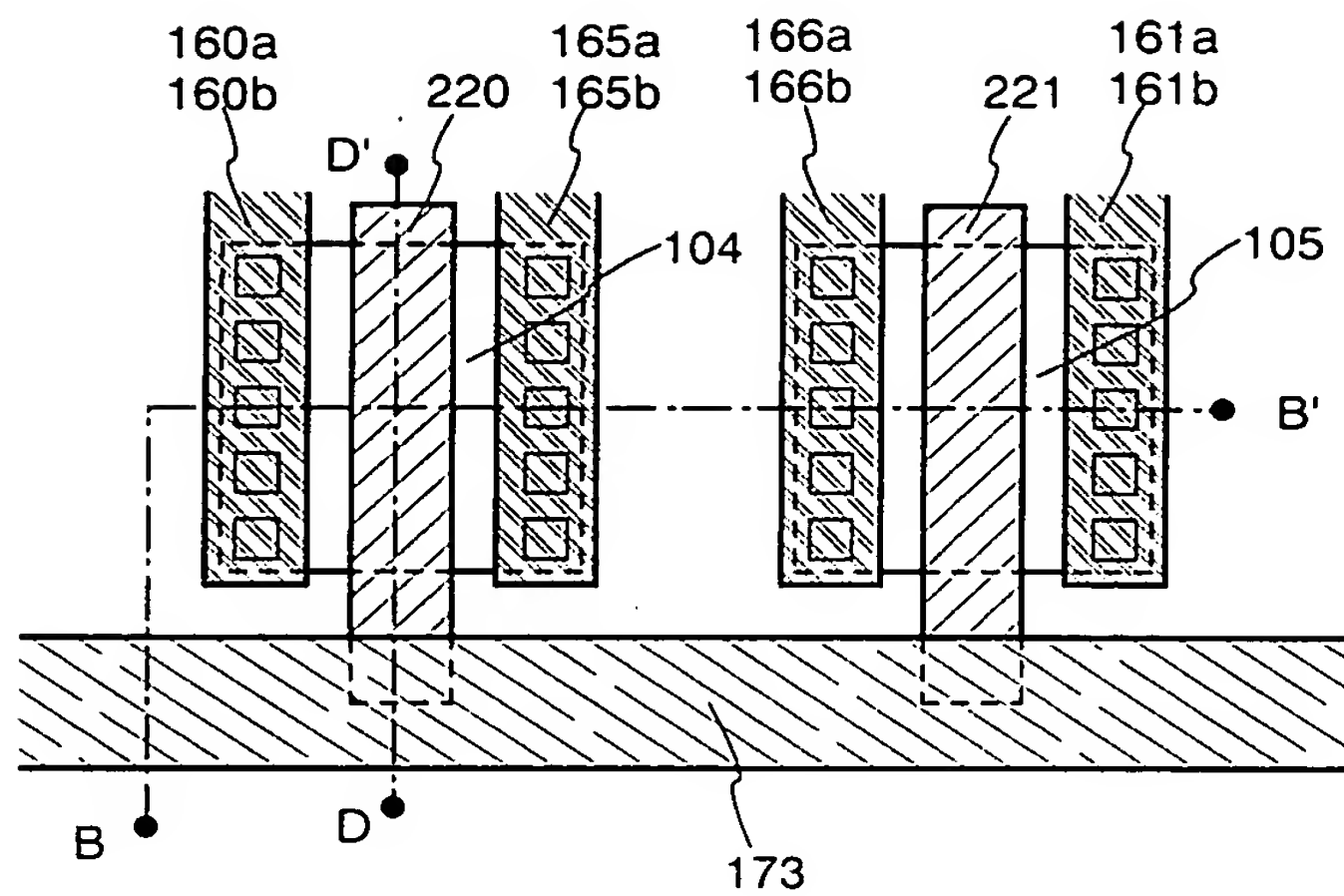


Fig. 8B

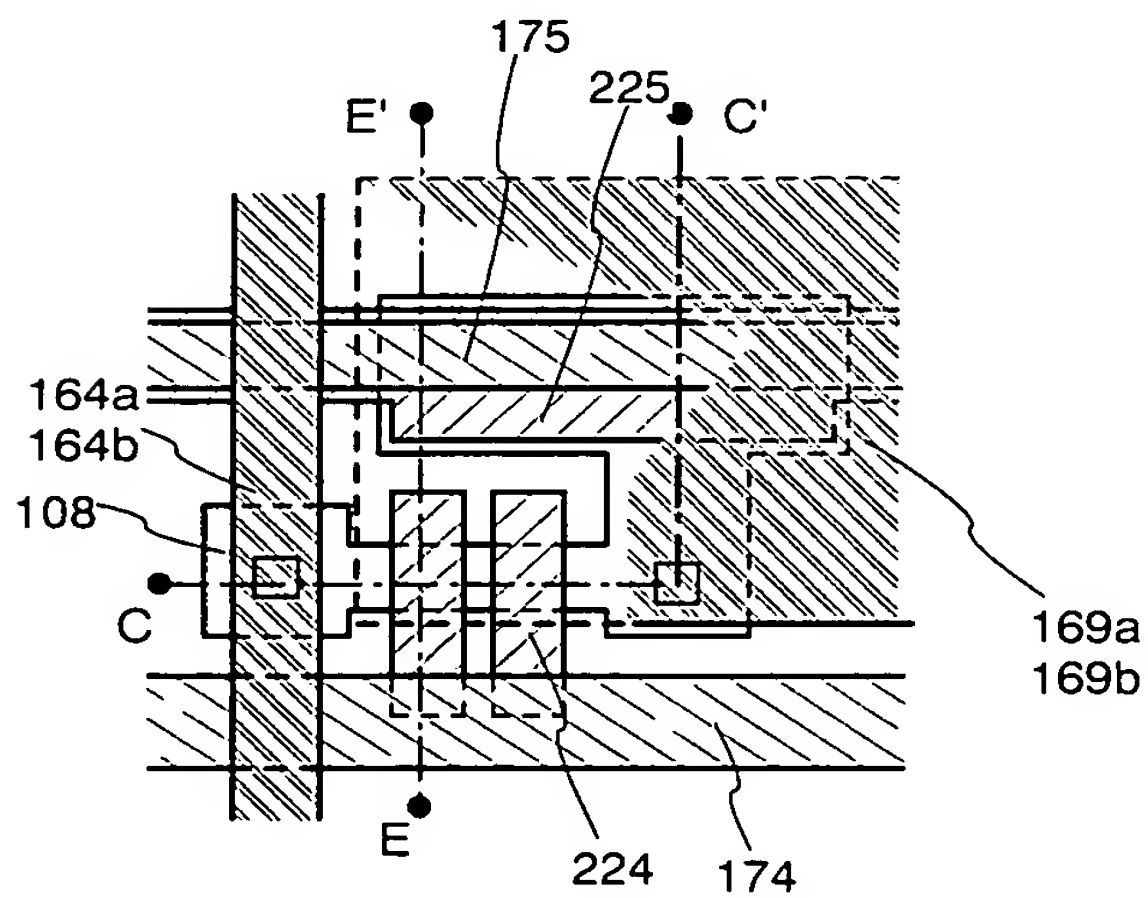




Fig. 9A

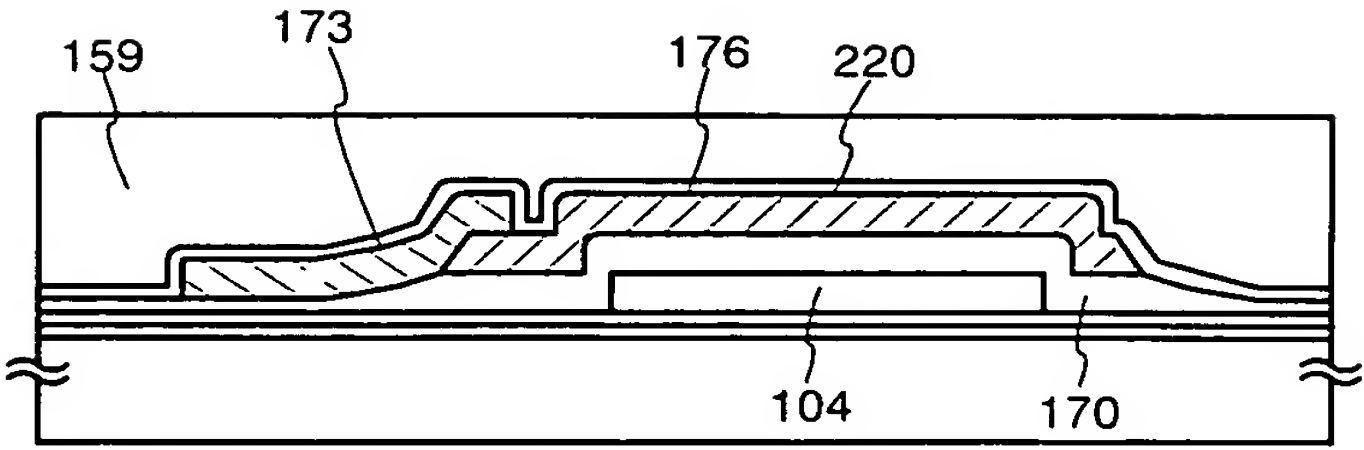


Fig. 9B

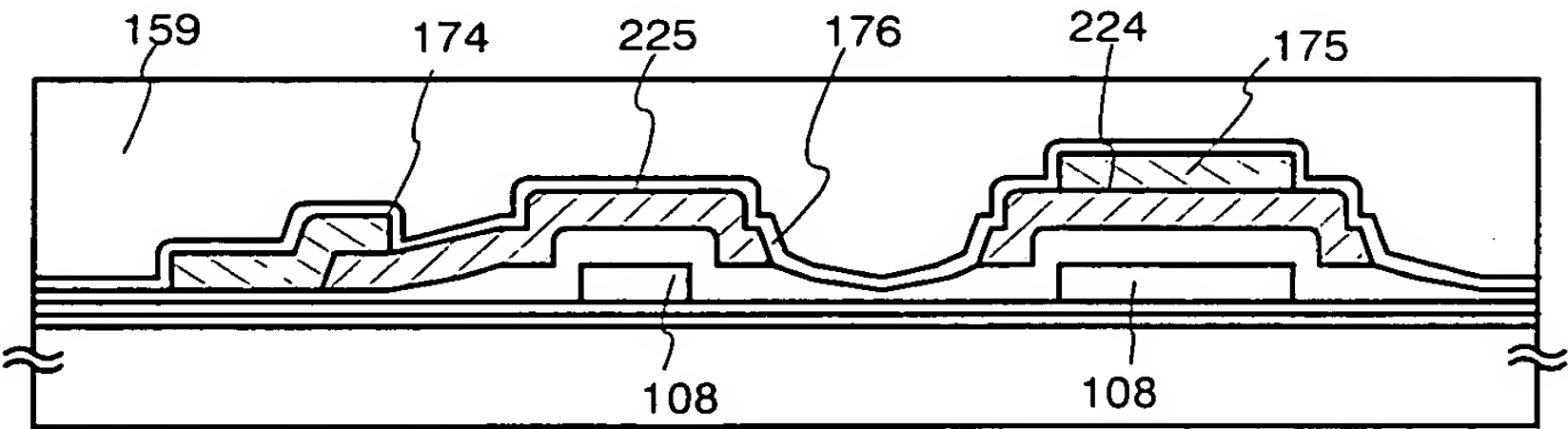


Fig. 10A

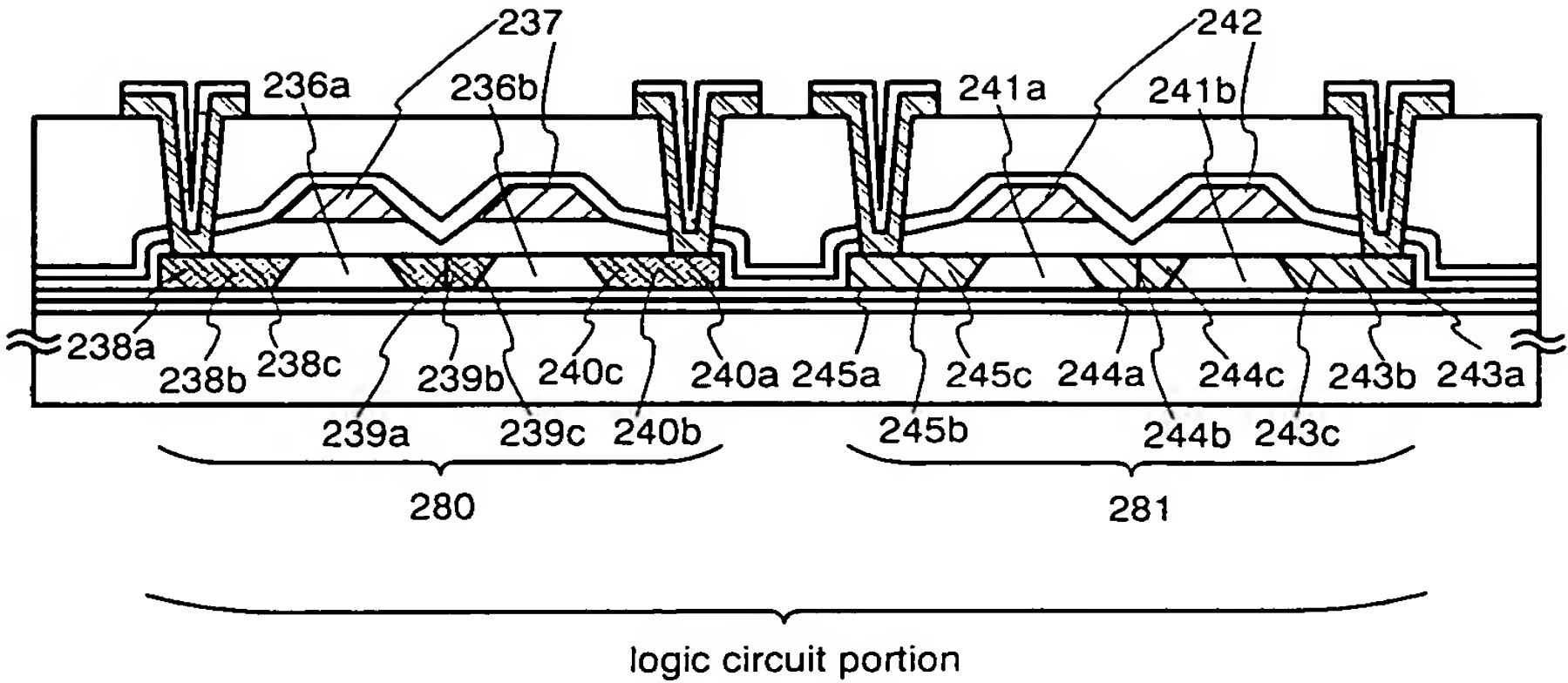


Fig. 10B

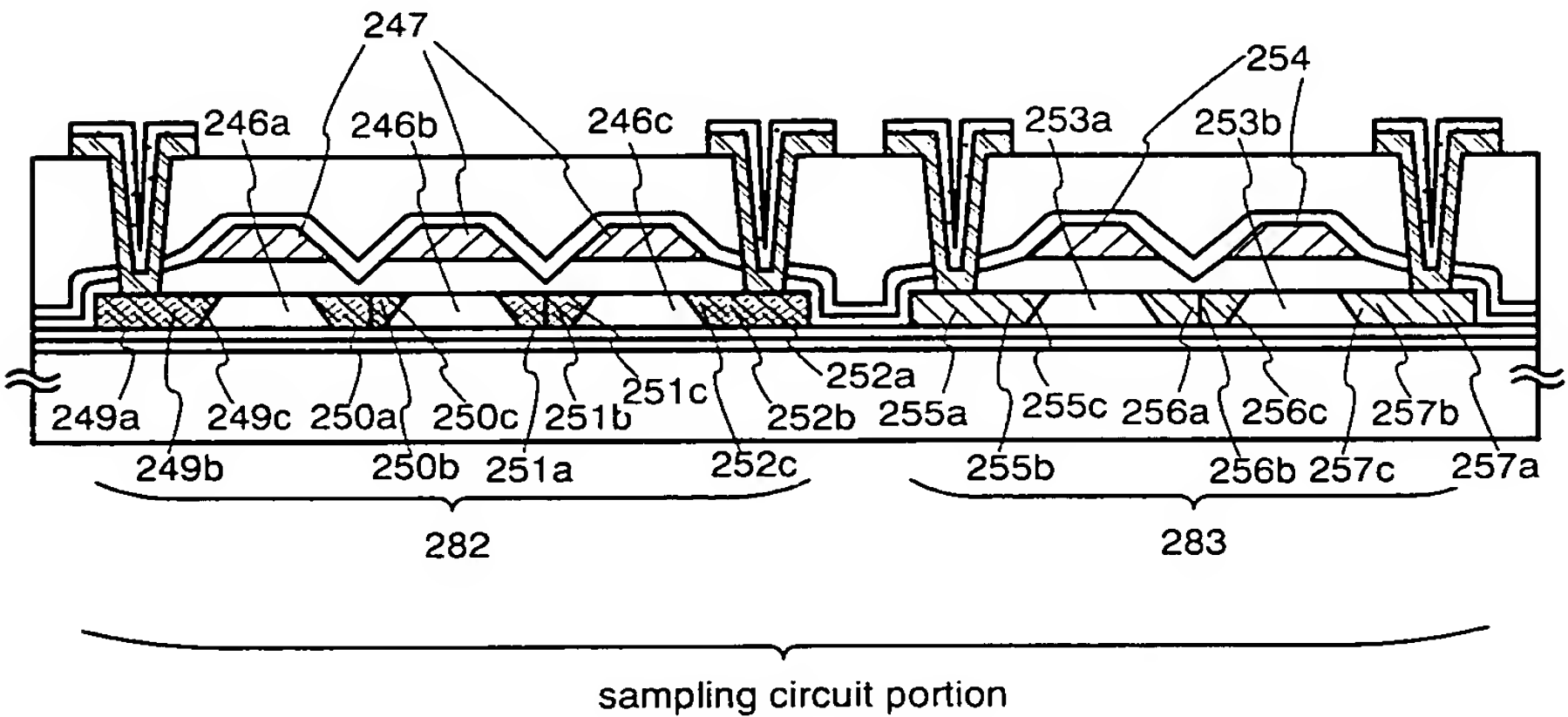


Fig. 11A

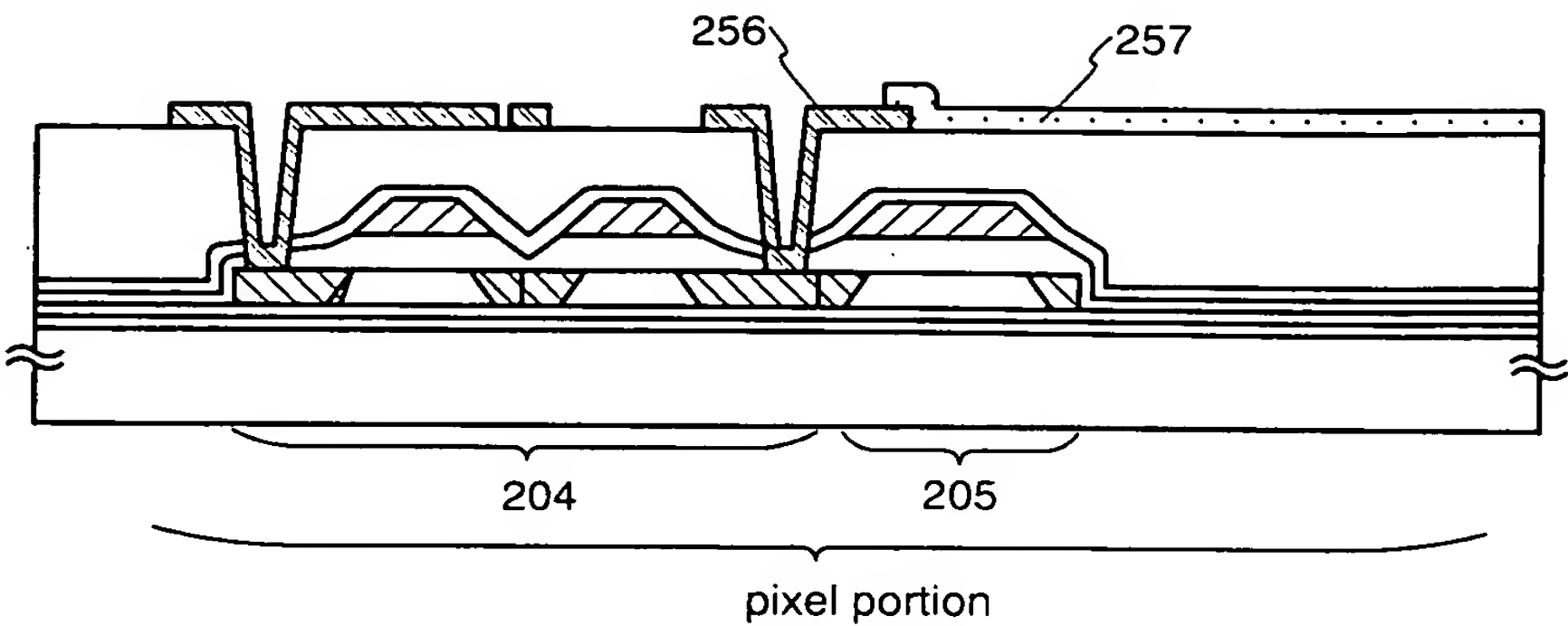


Fig. 11B

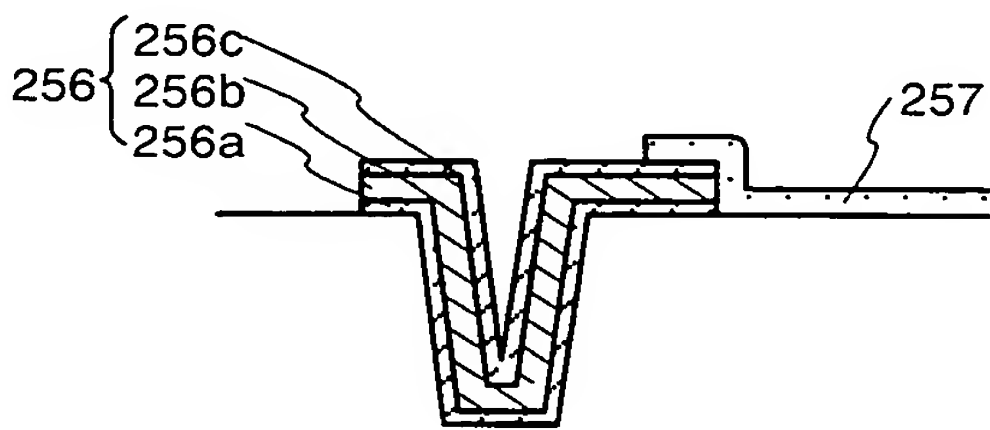


Fig. 11C

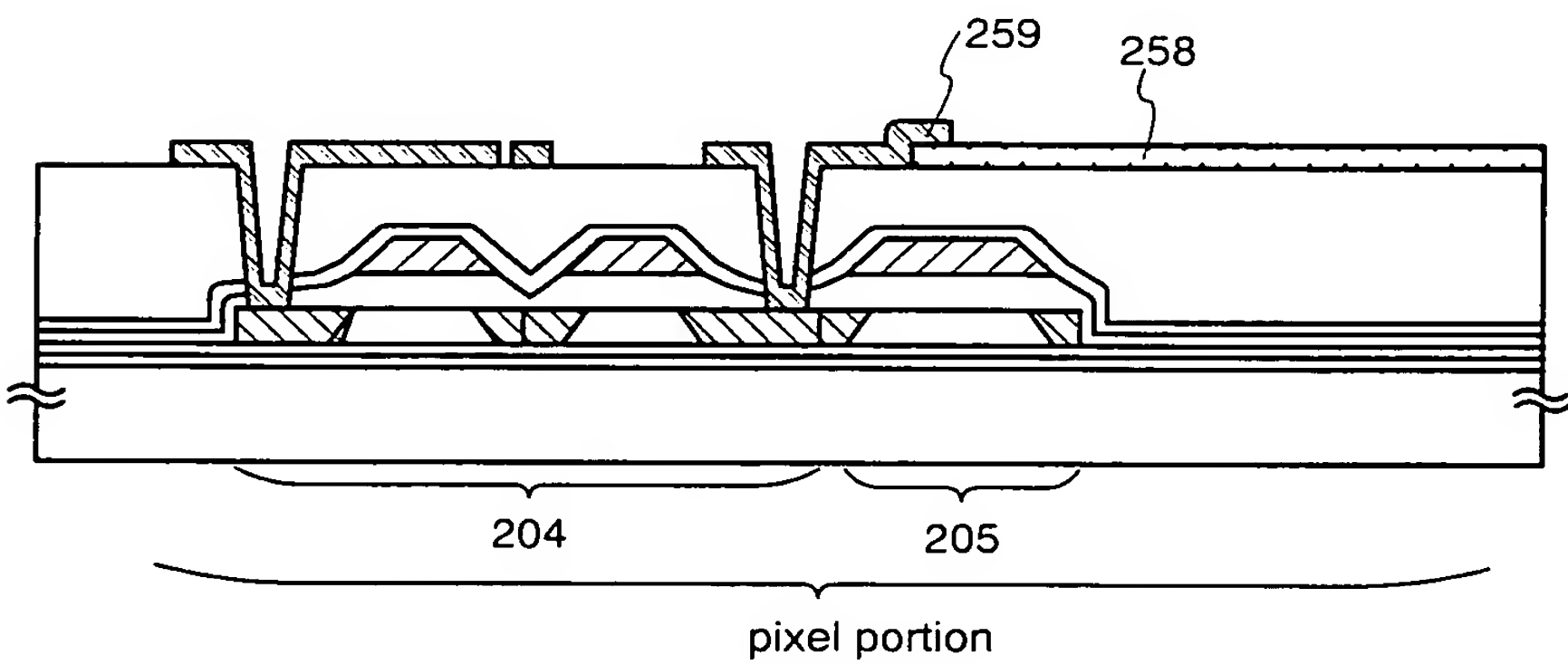
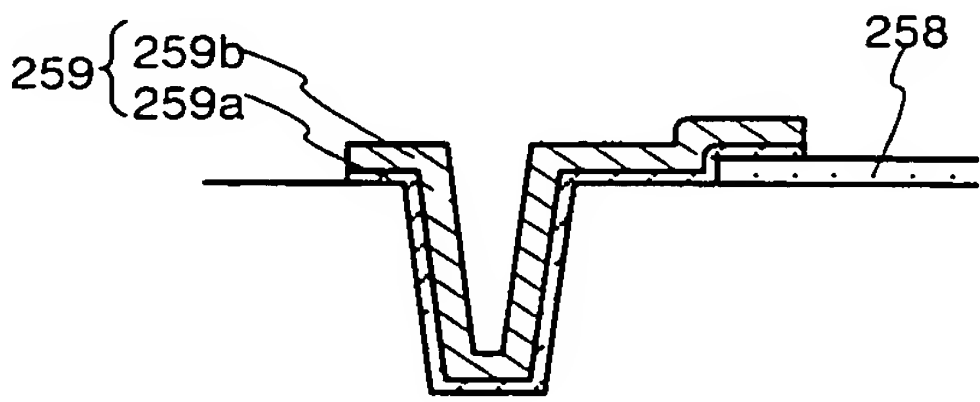


Fig. 11D



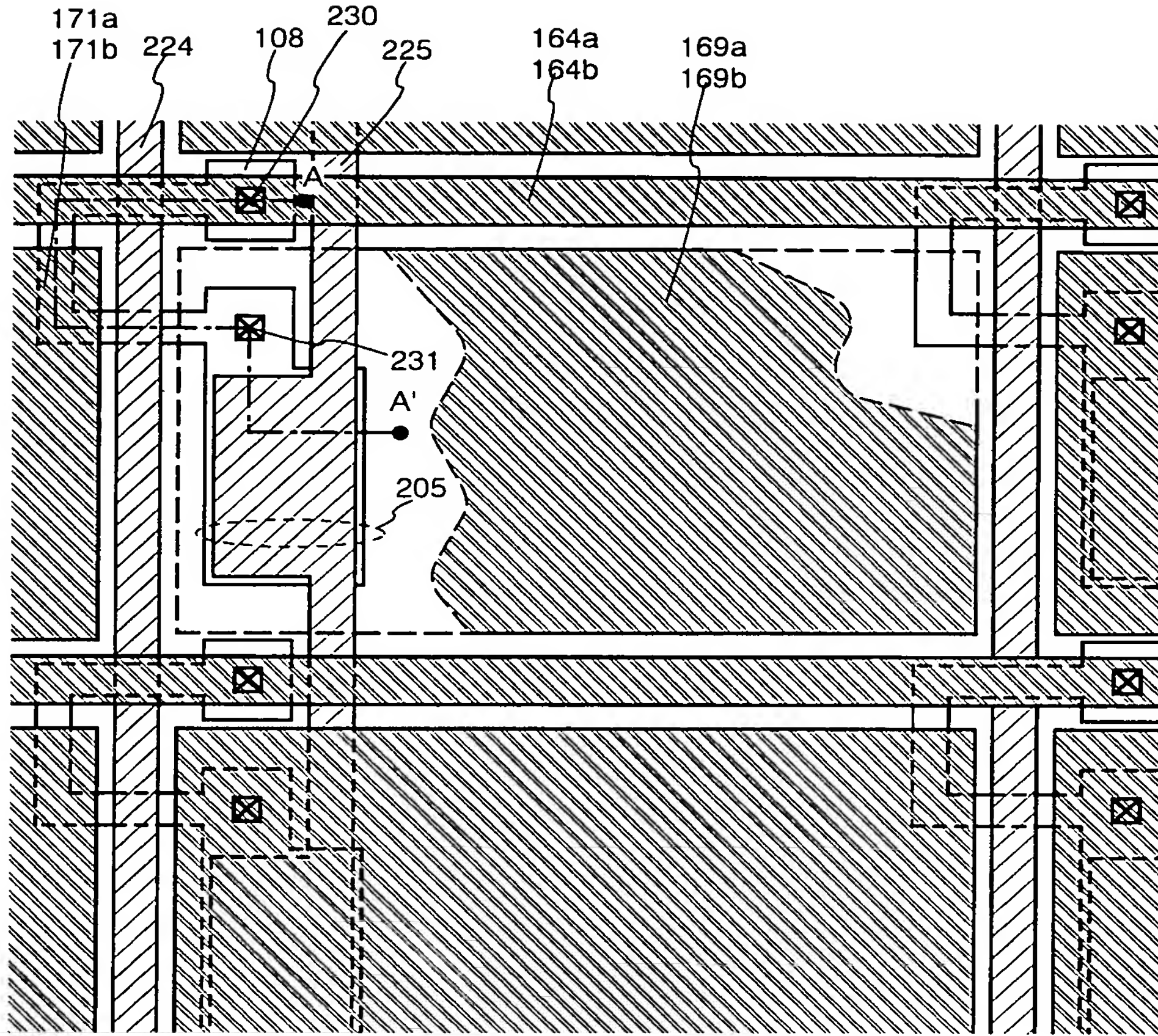


Fig. 12

Fig. 13A

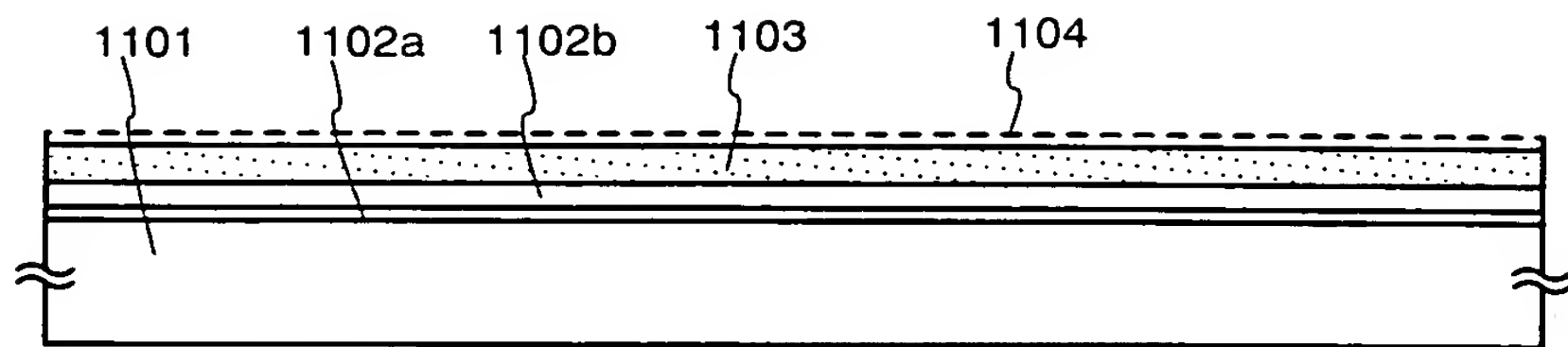


Fig. 13B

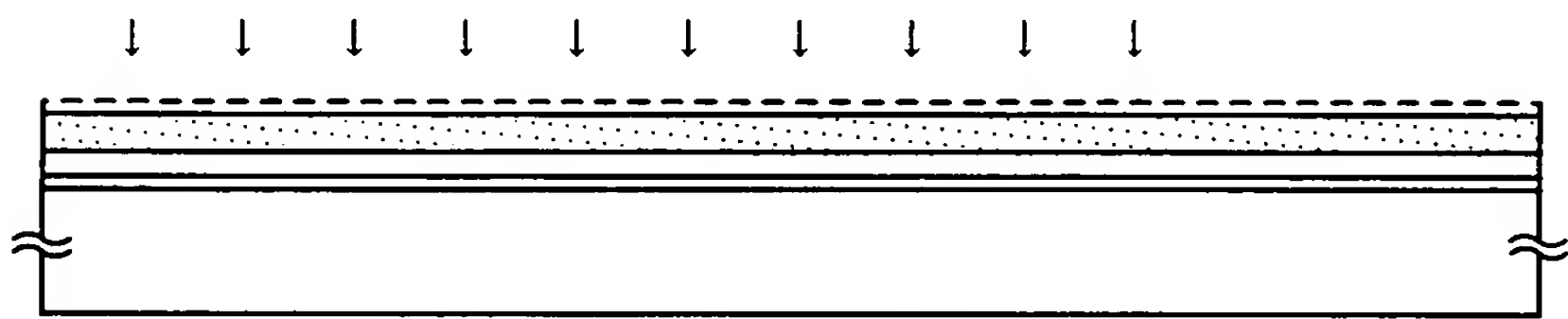
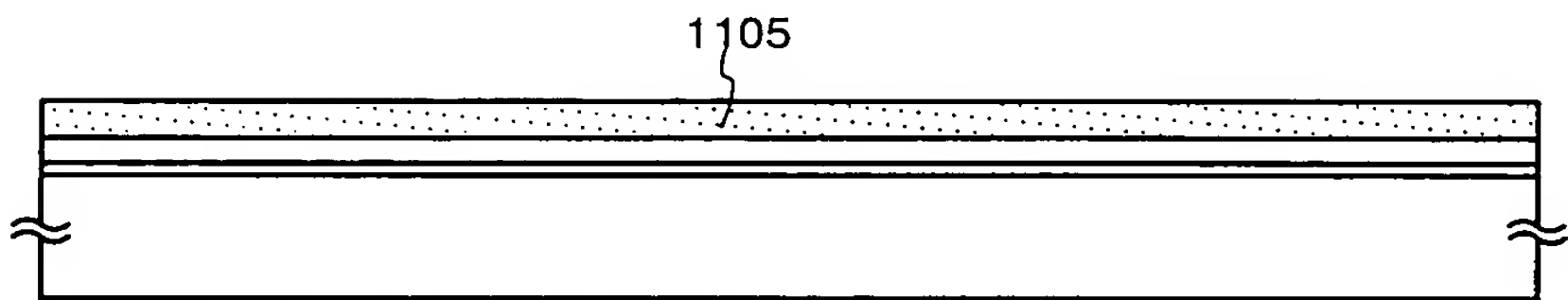


Fig. 13C



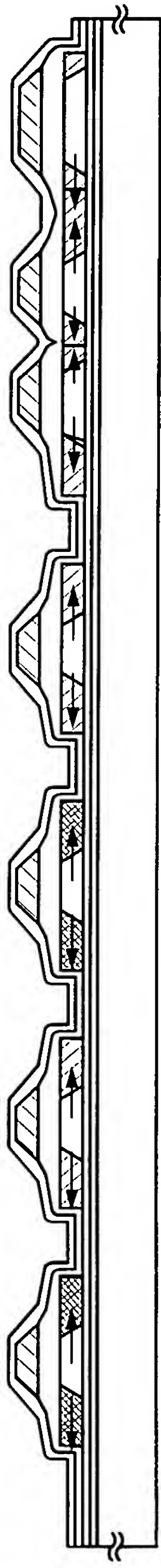


Fig. 14

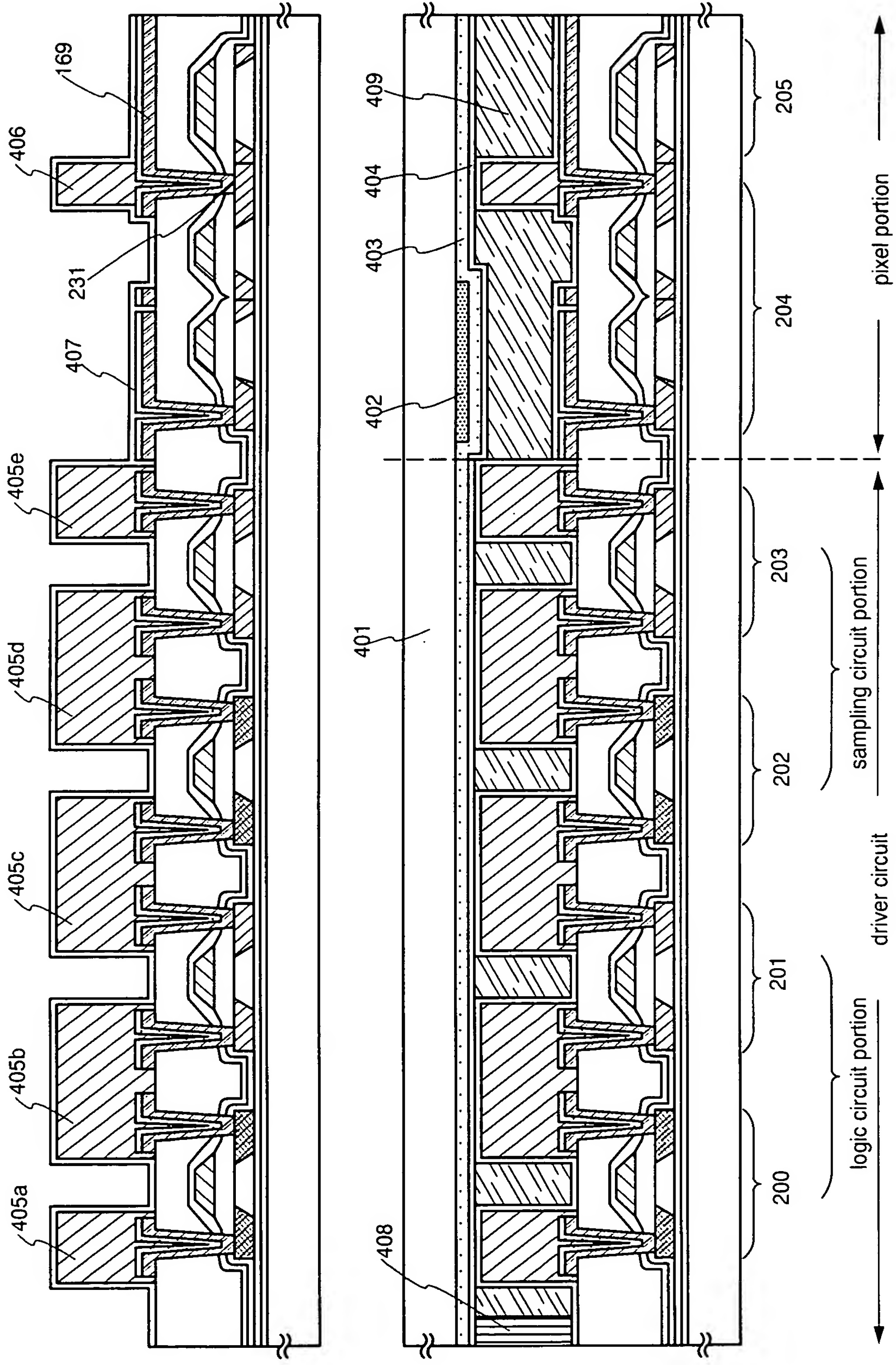


Fig. 15





Fig. 17A

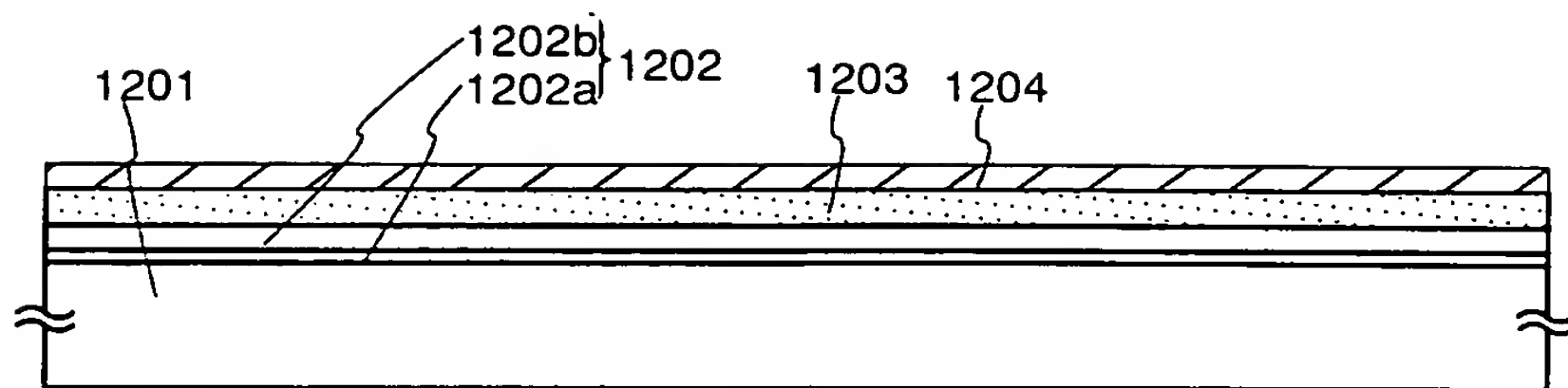


Fig. 17B

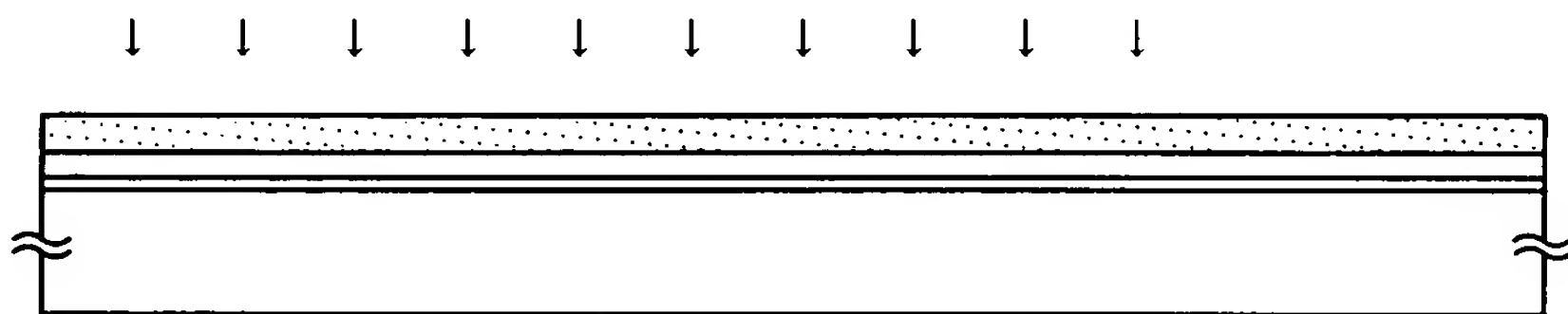
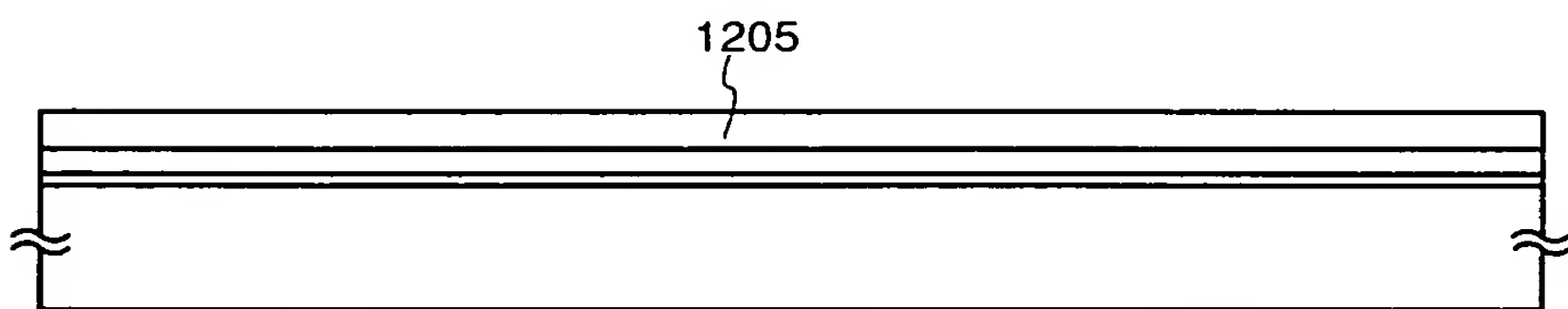


Fig. 17C



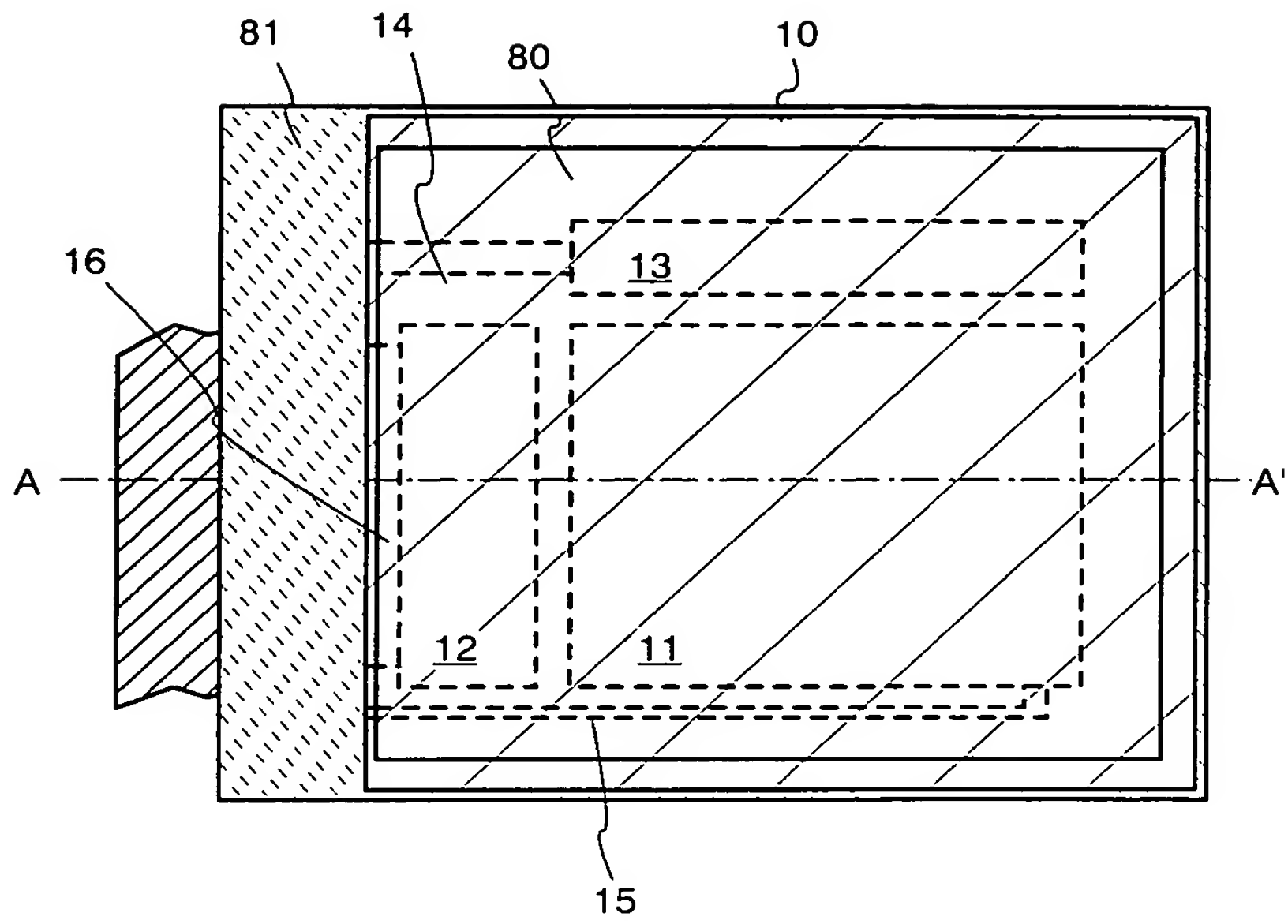


Fig. 18A

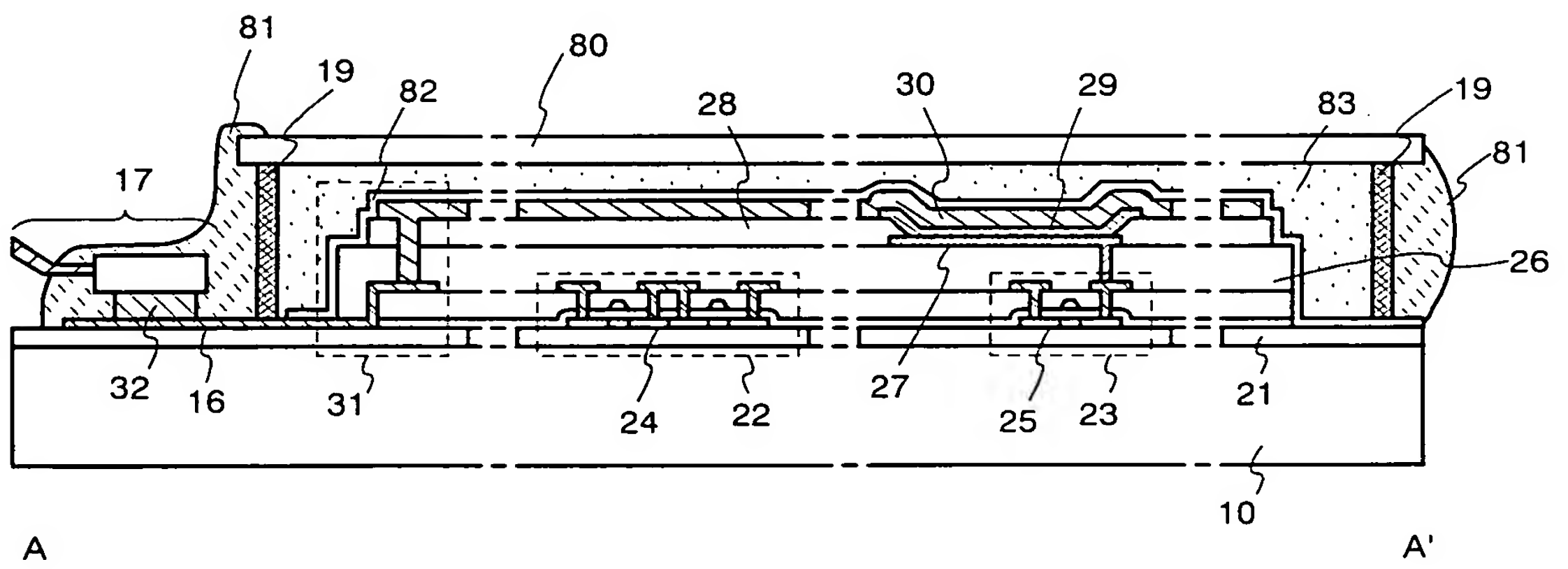


Fig. 18B

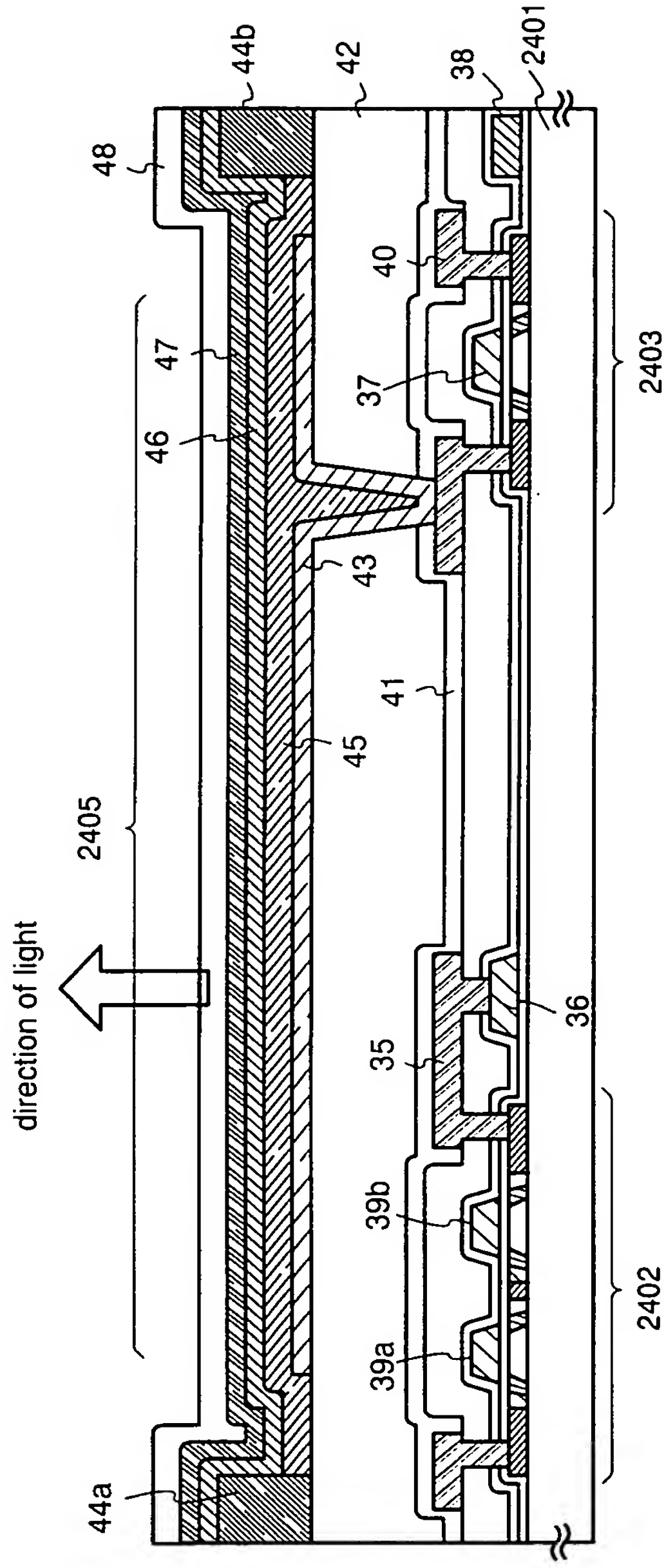


Fig. 19A

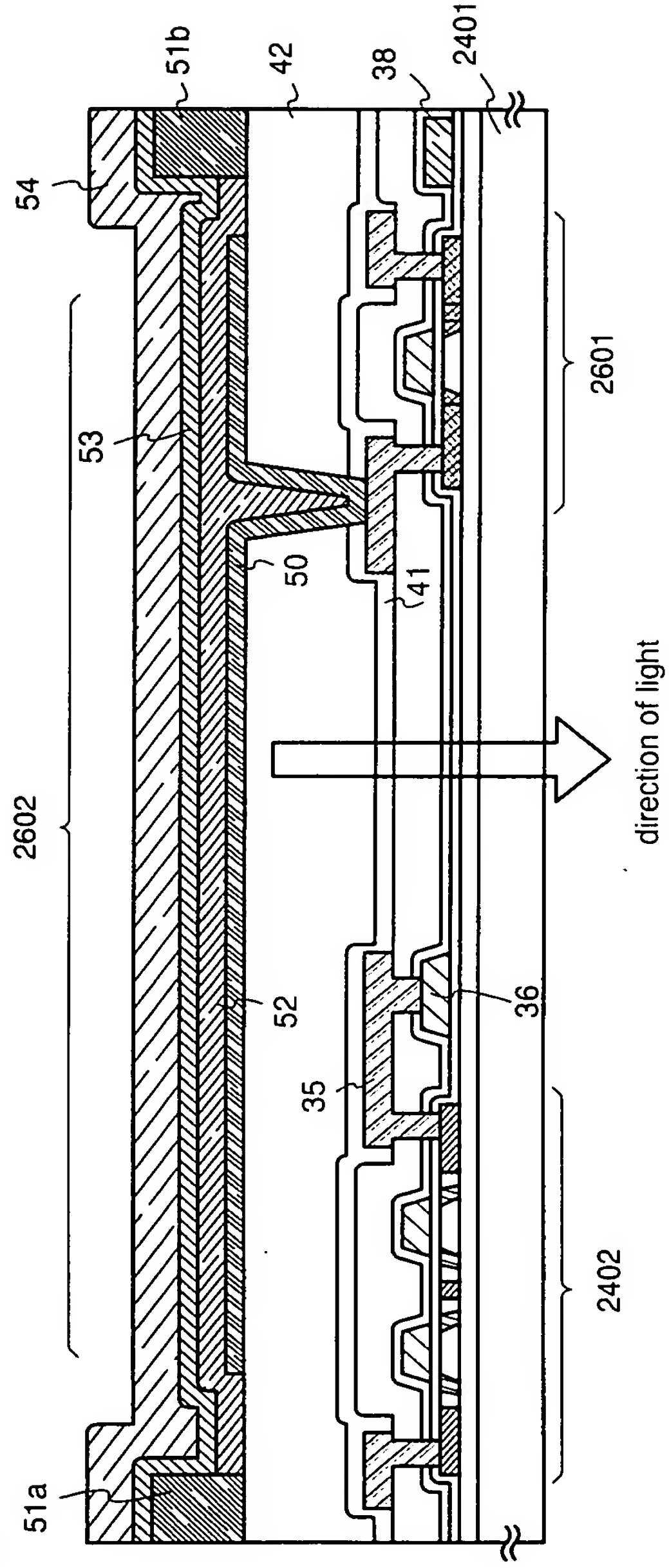


Fig. 19B

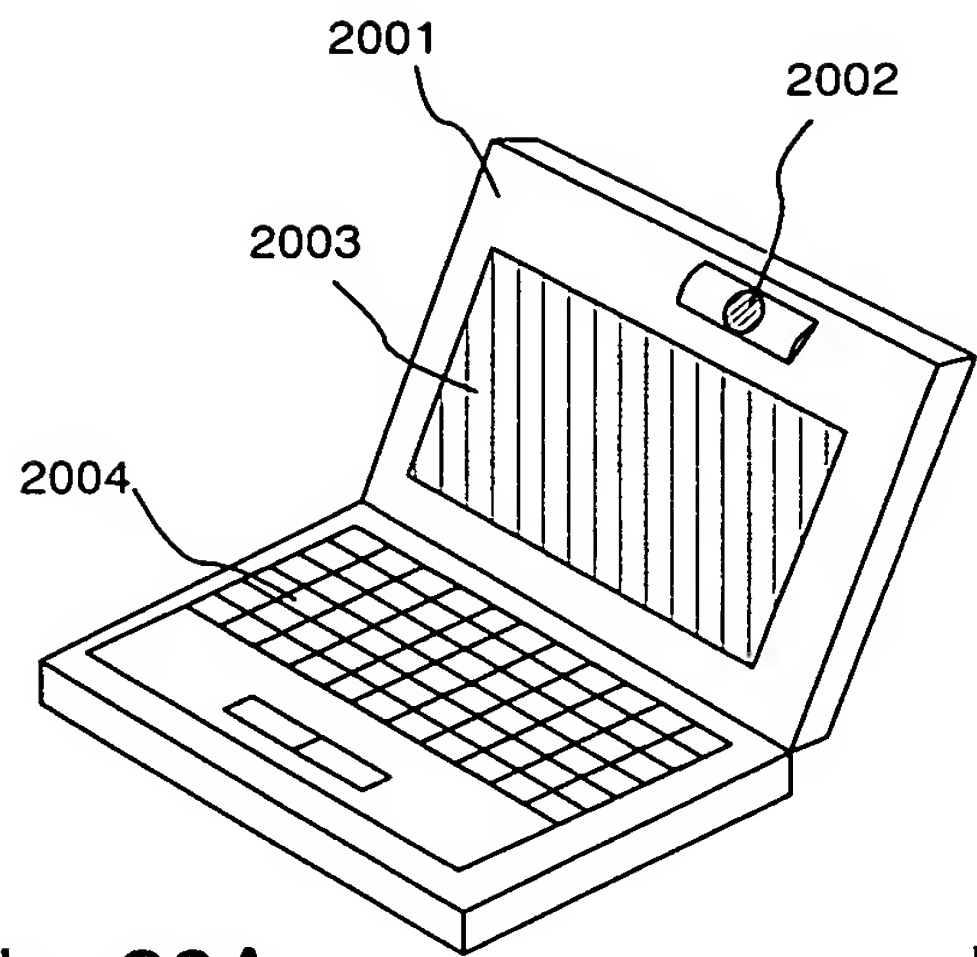


Fig. 20A

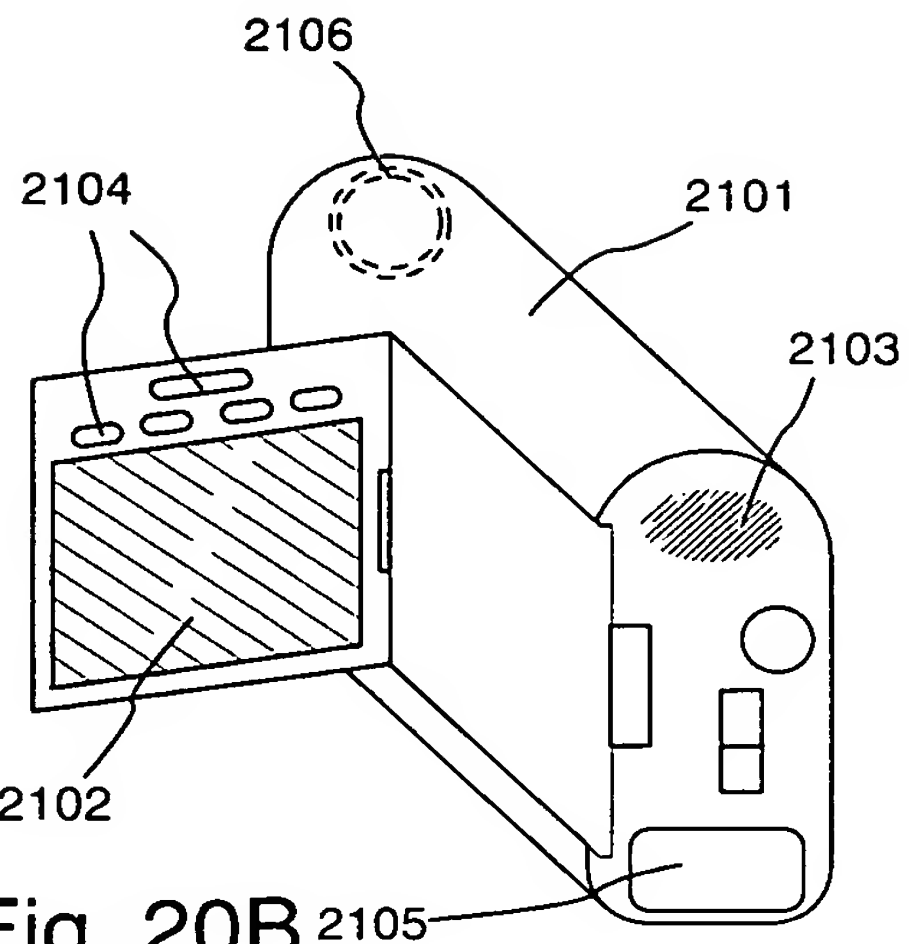


Fig. 20B

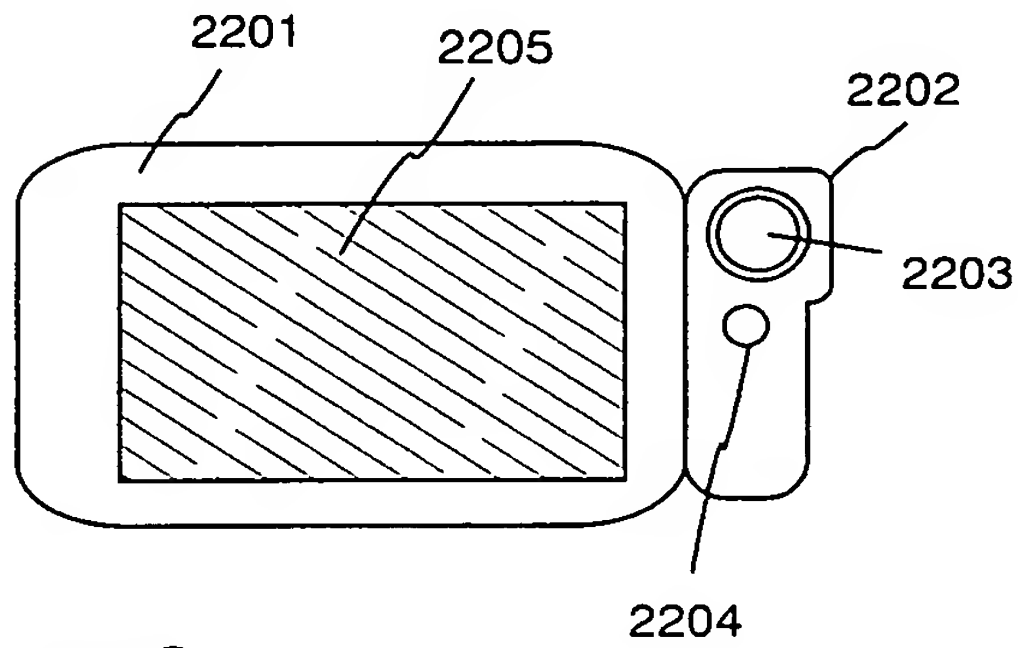


Fig. 20C

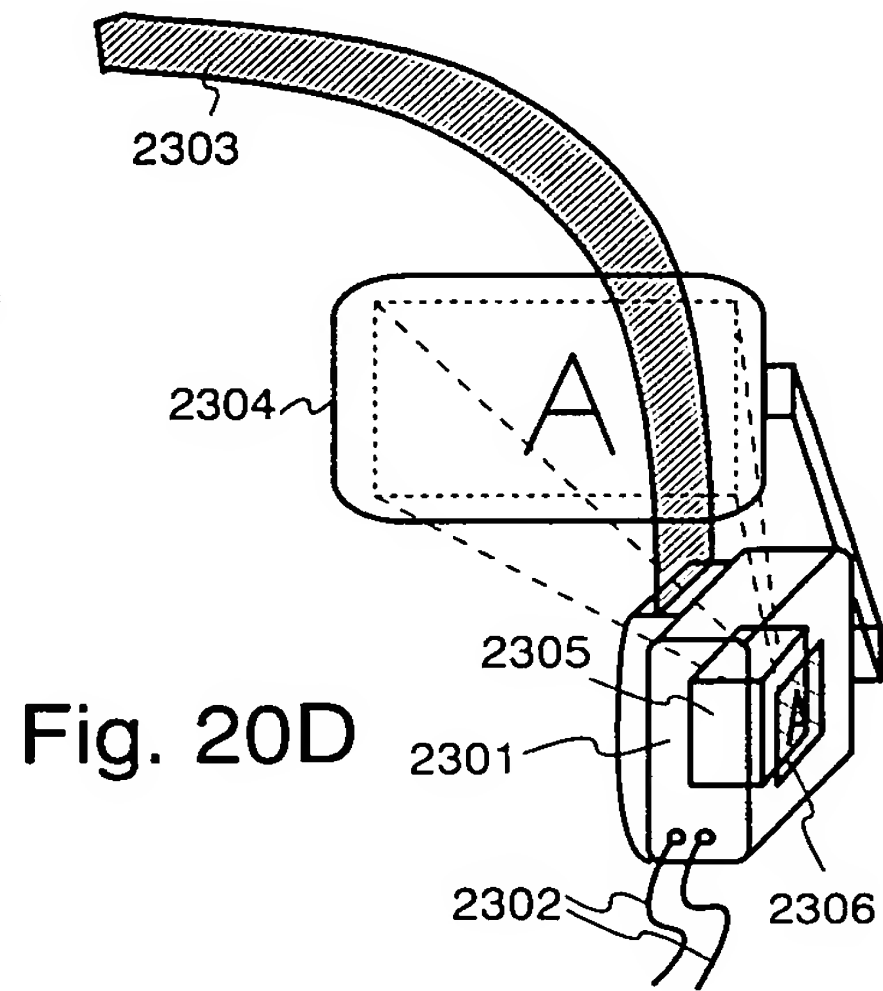


Fig. 20D

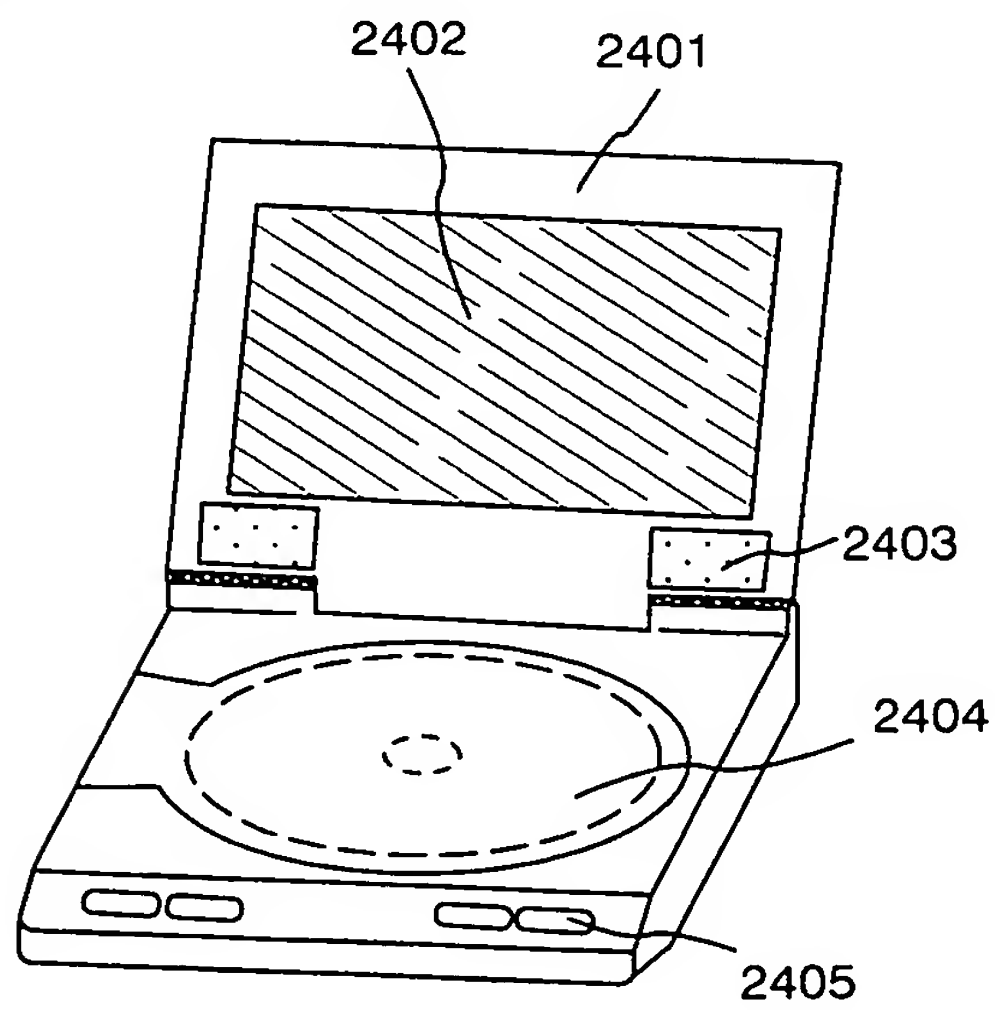


Fig. 20E

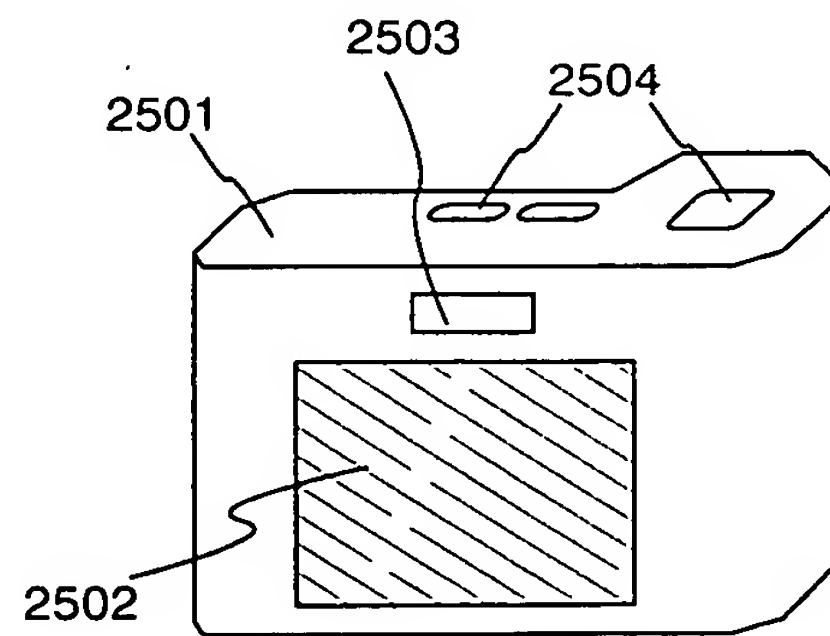


Fig. 20F

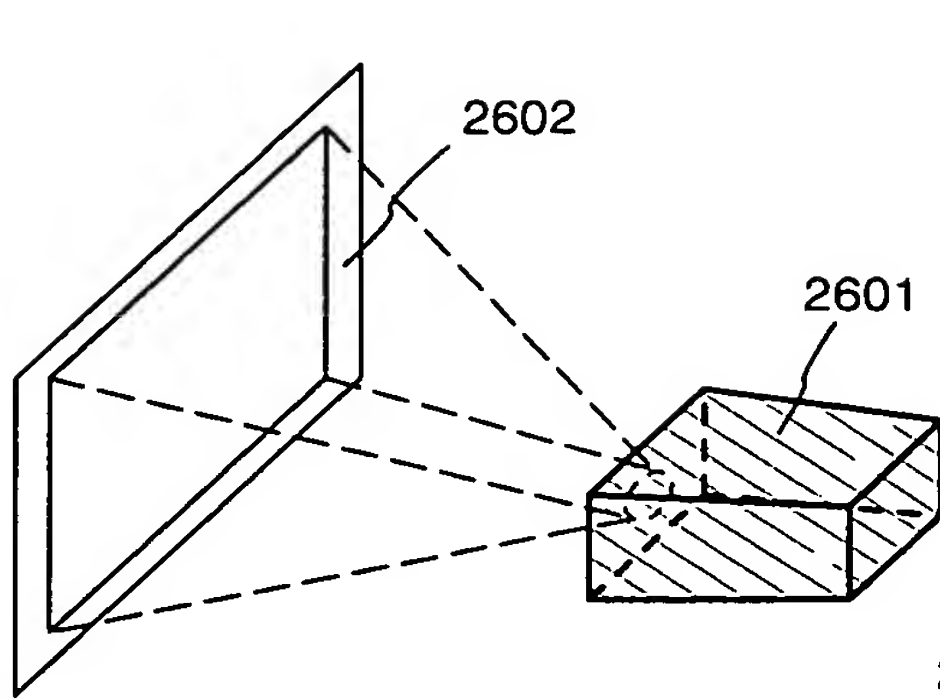


Fig. 21A

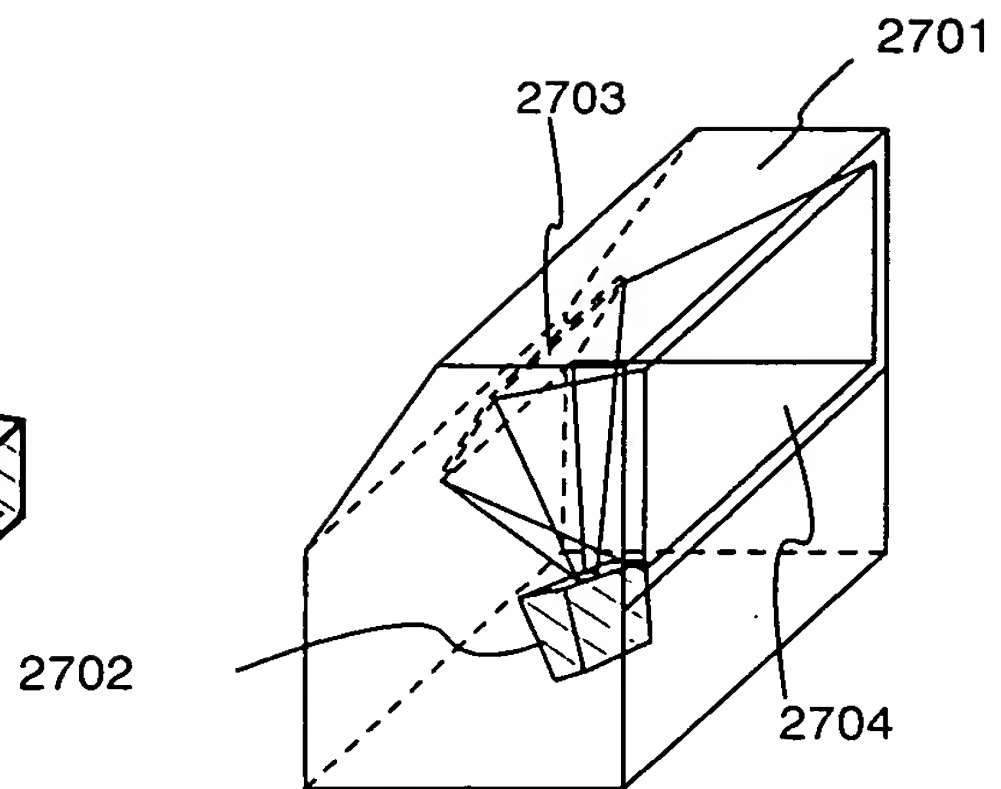


Fig. 21B

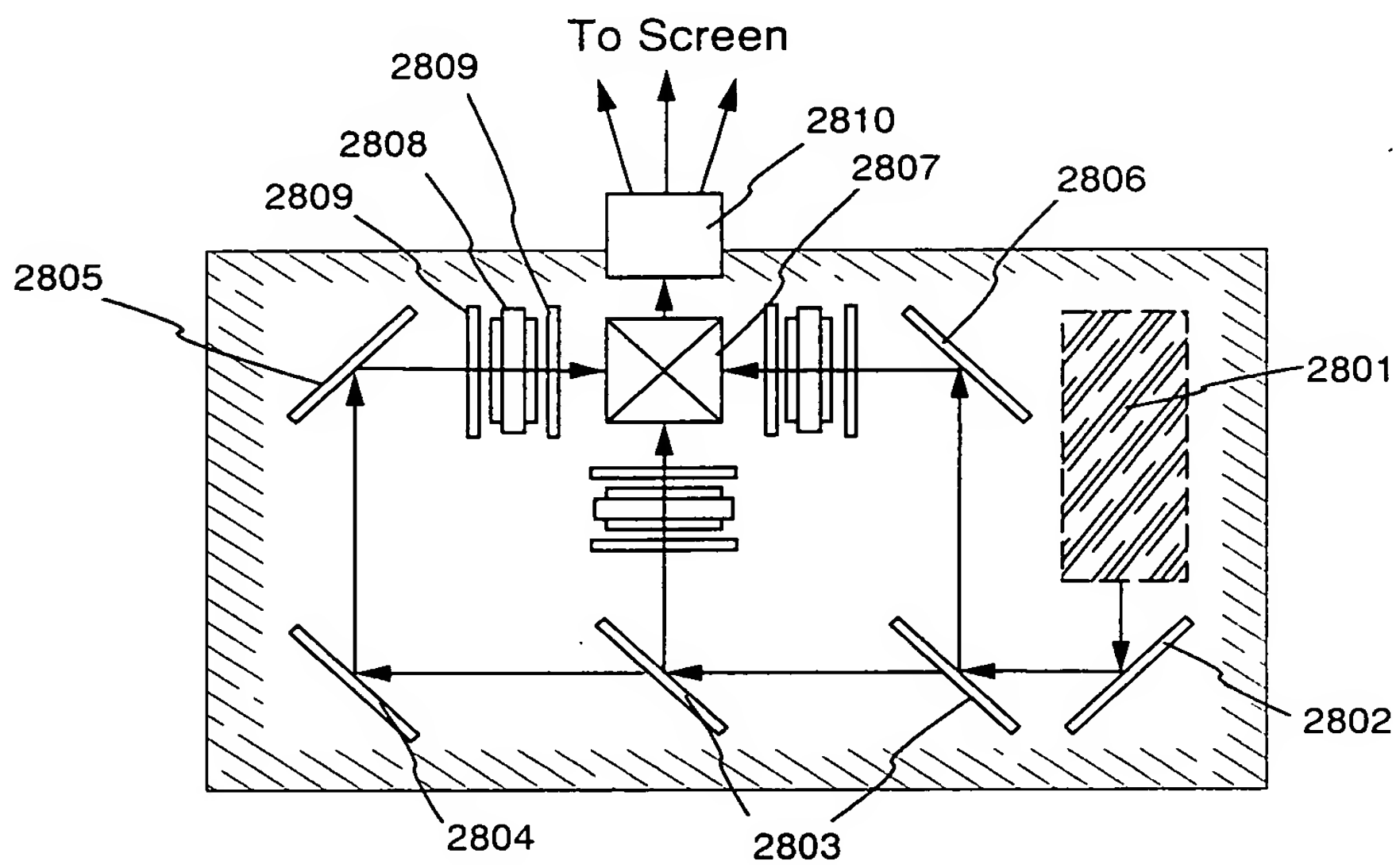


Fig. 21C

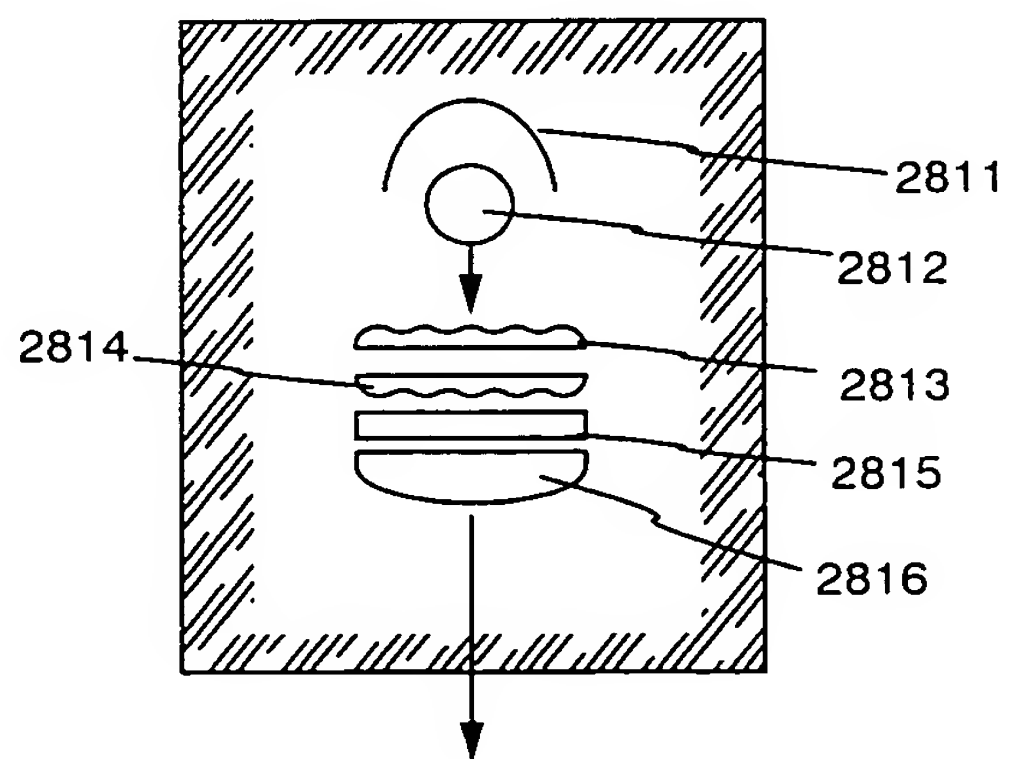


Fig. 21D

Fig. 22A

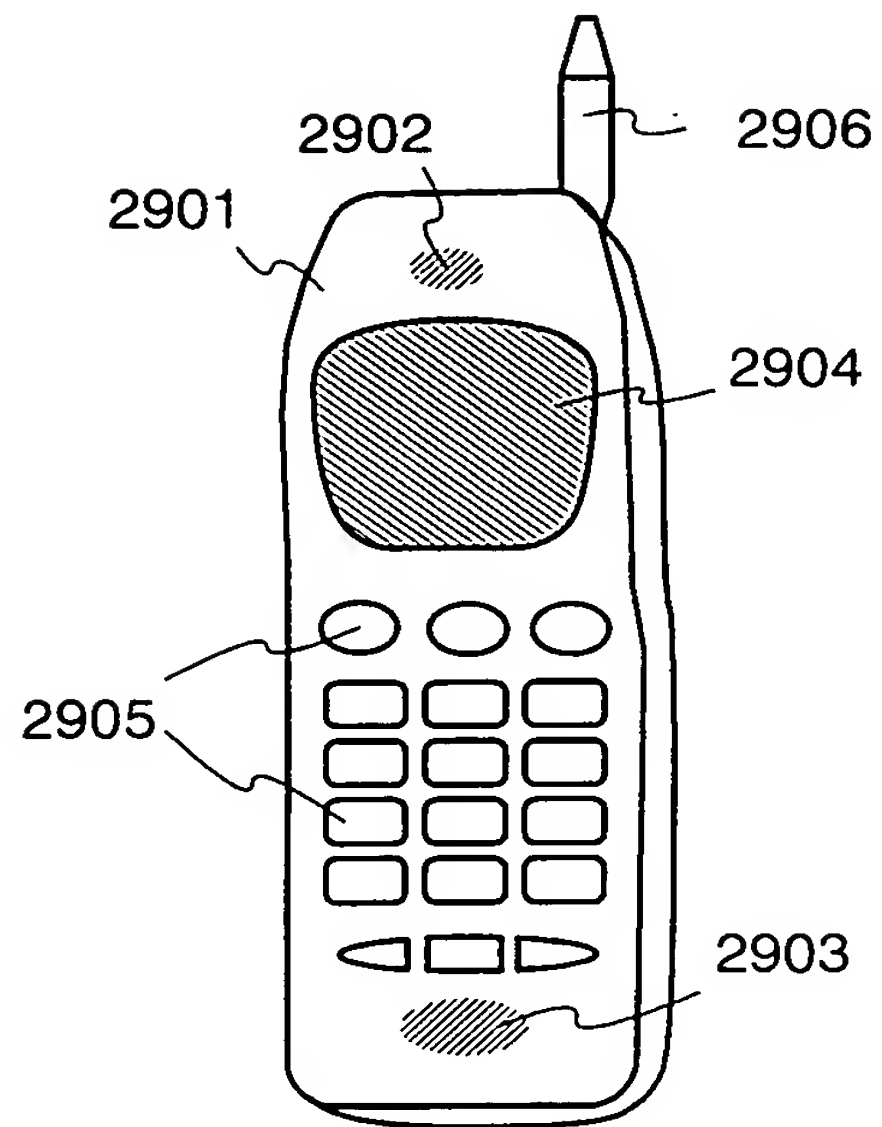


Fig. 22B

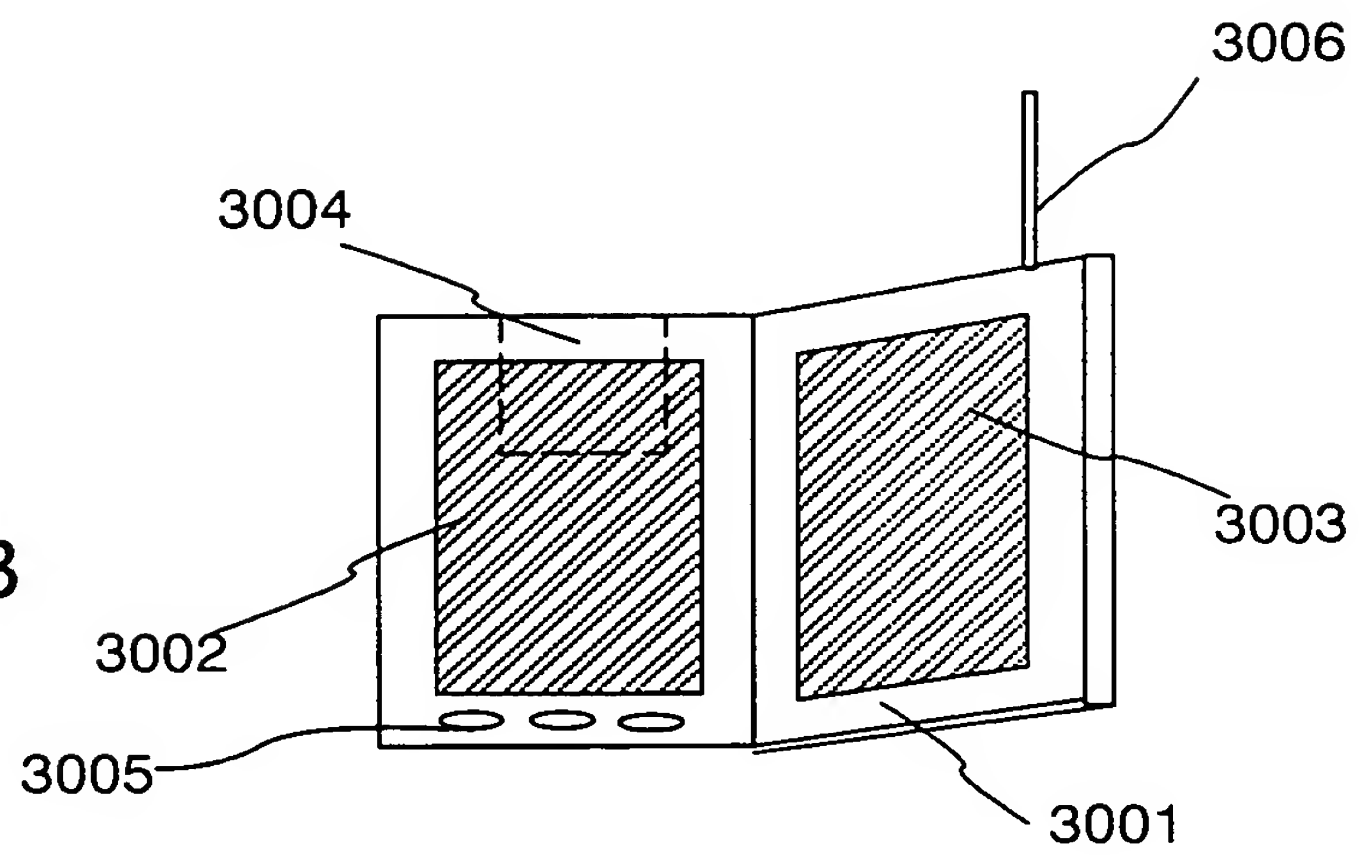
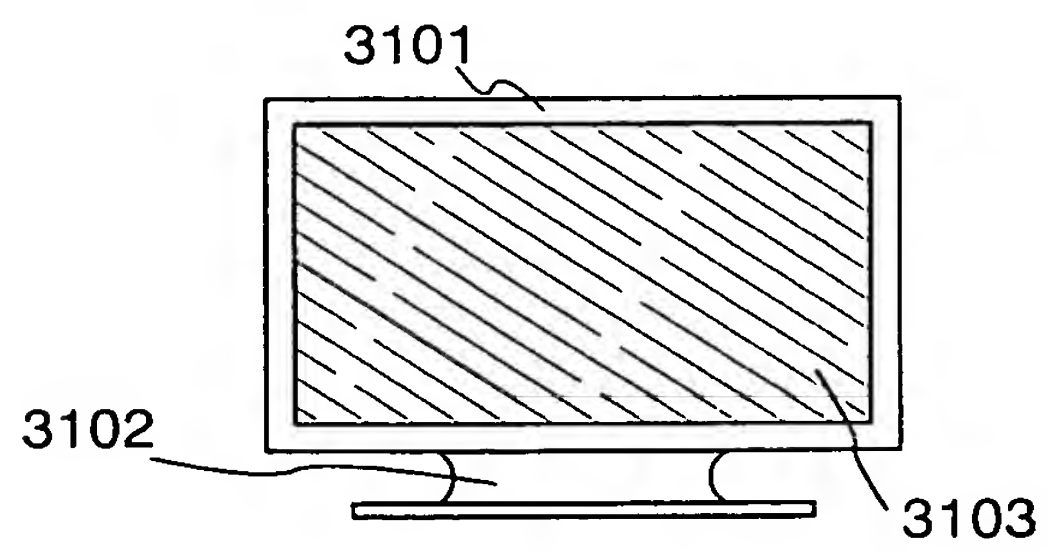


Fig. 22C



FOOT 1990

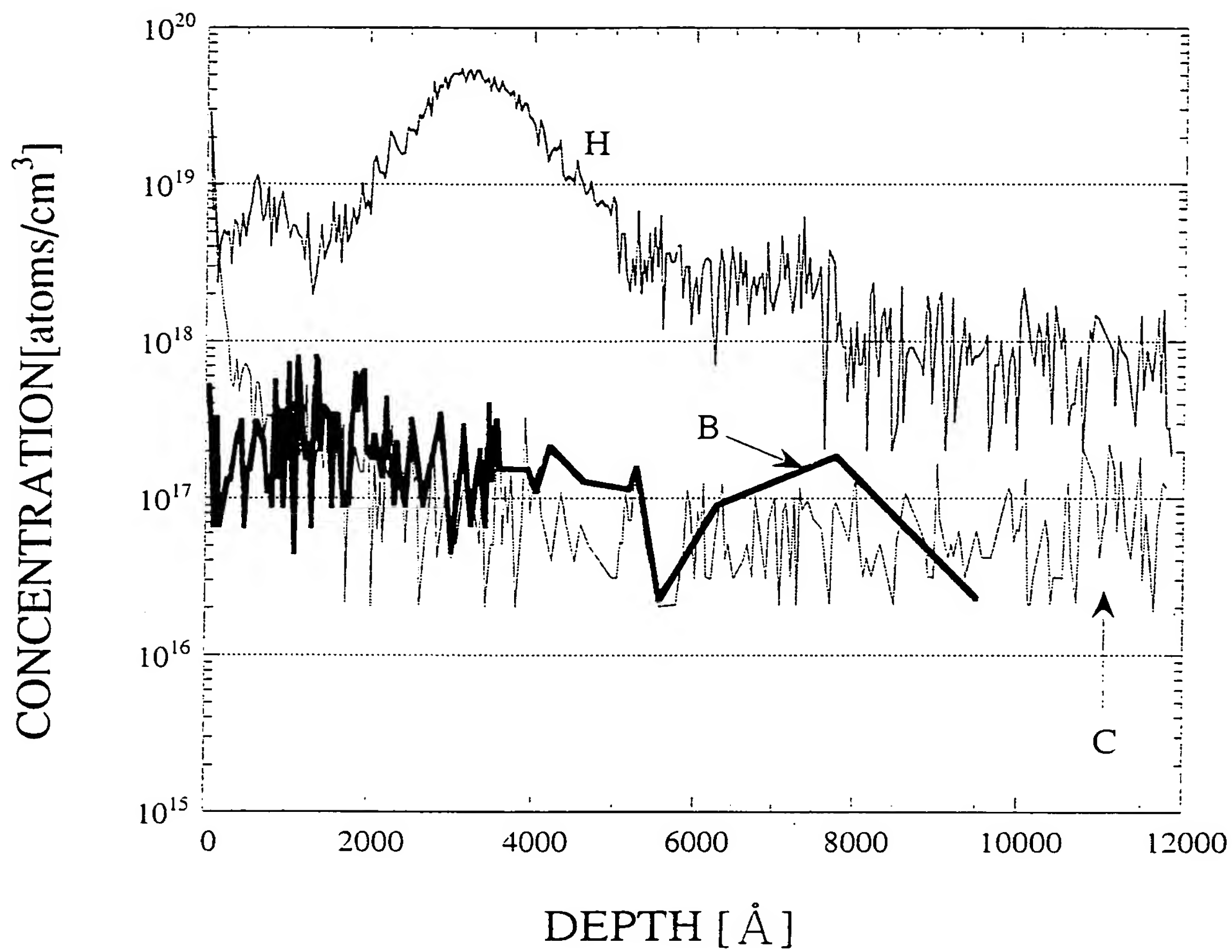


Fig. 23

FOOTPRINT

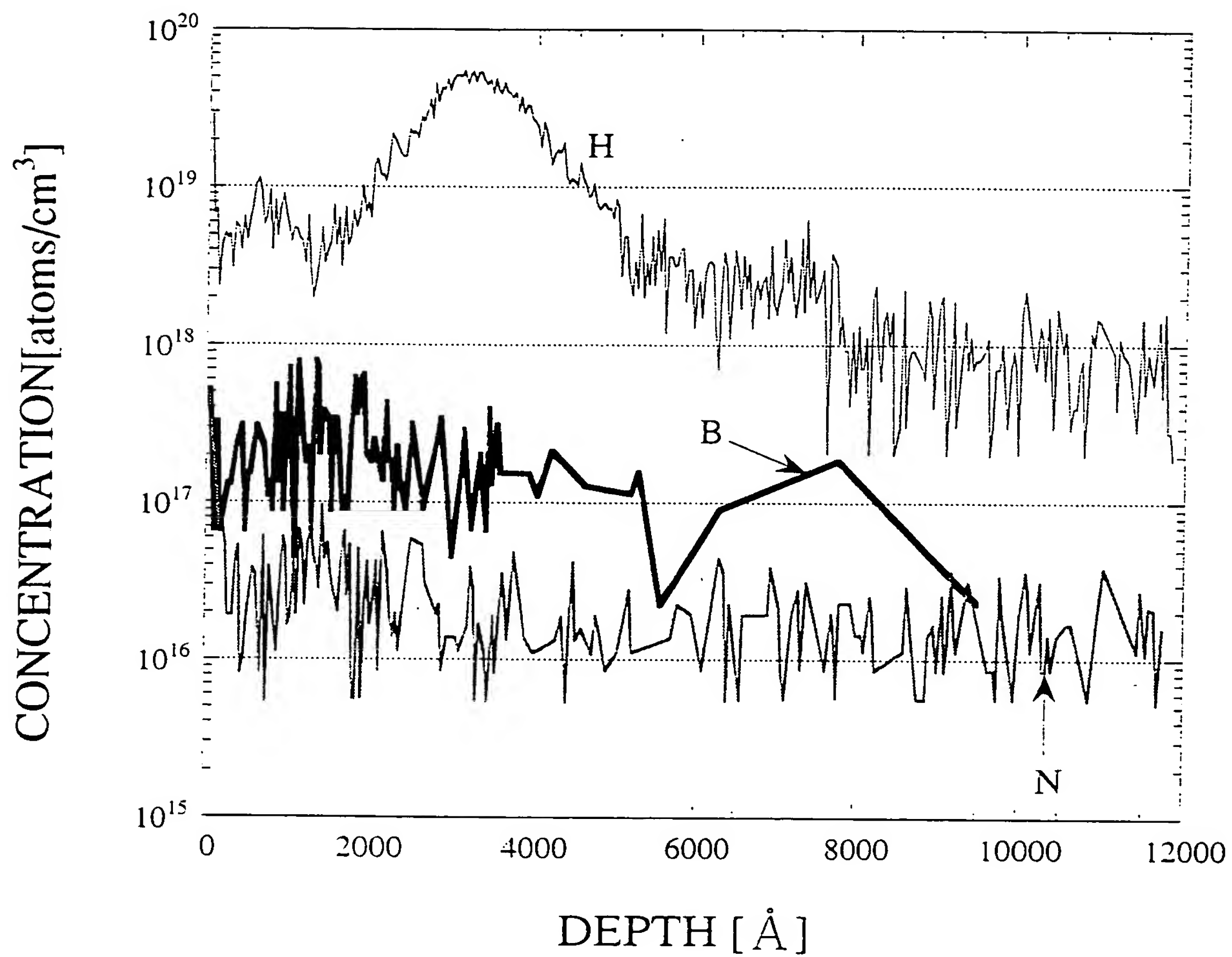


Fig. 24



FOOT 4751.50

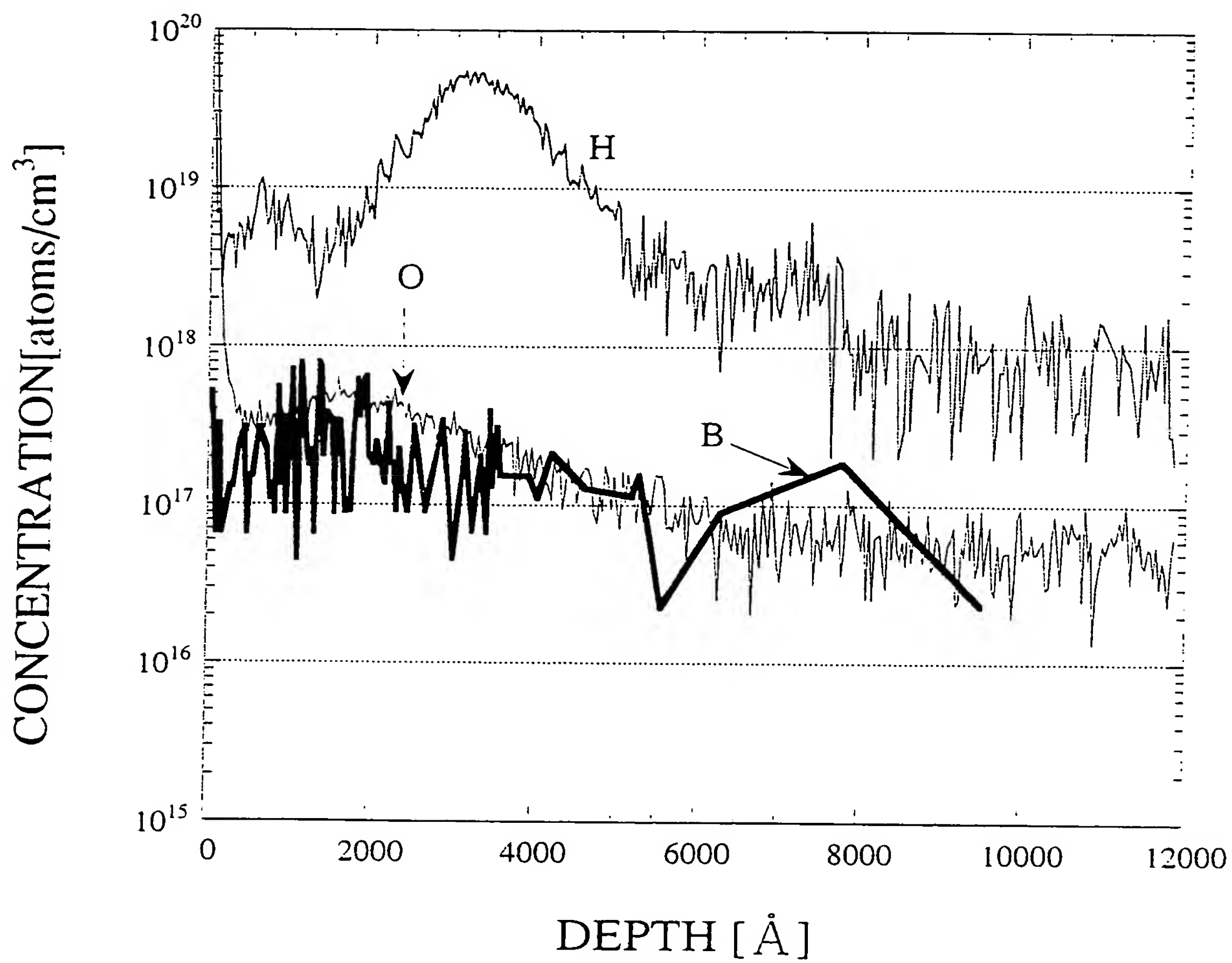


Fig. 25

10310-149460

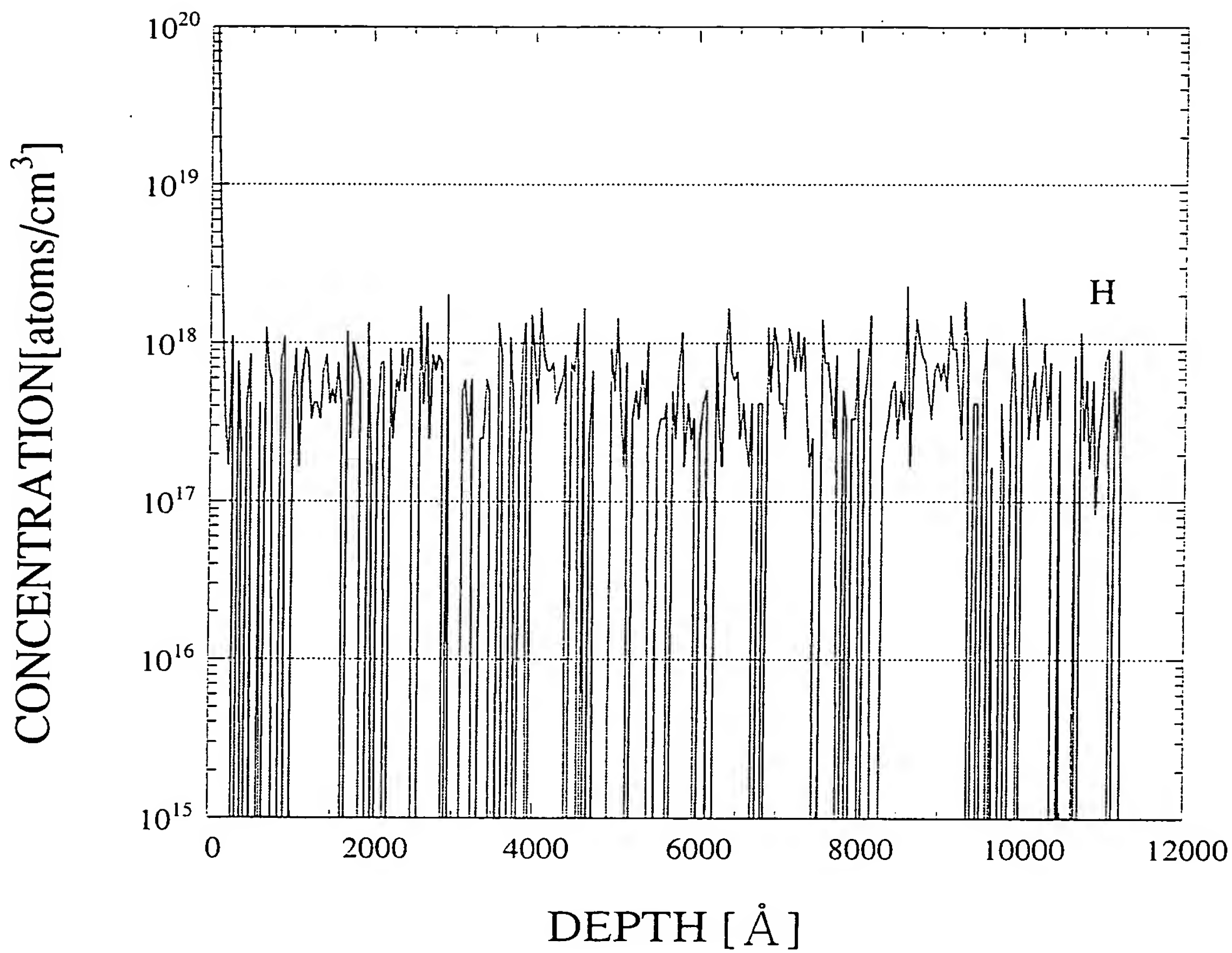


Fig. 26

1.08E+10 7.9E9 2.6E9

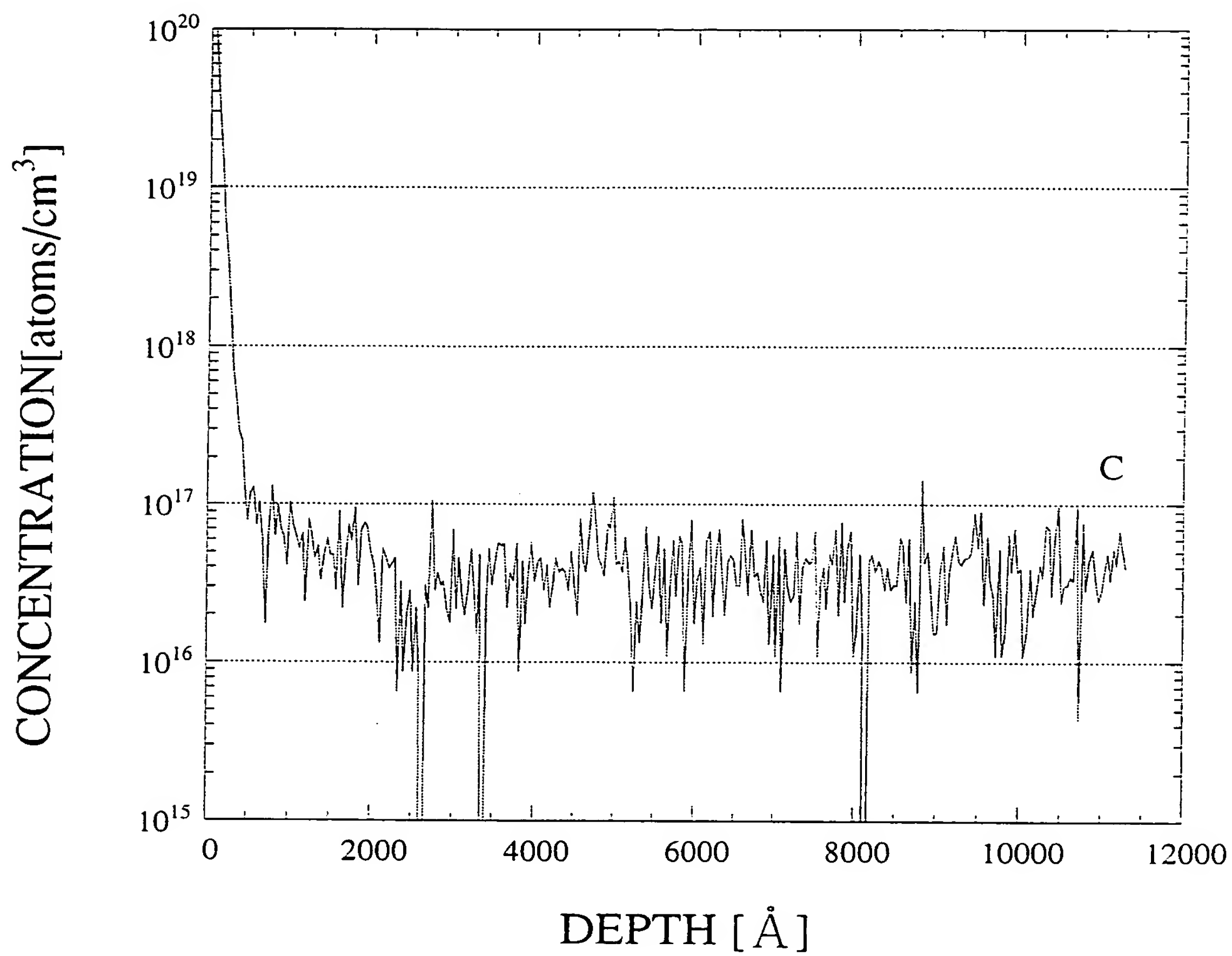


Fig. 27

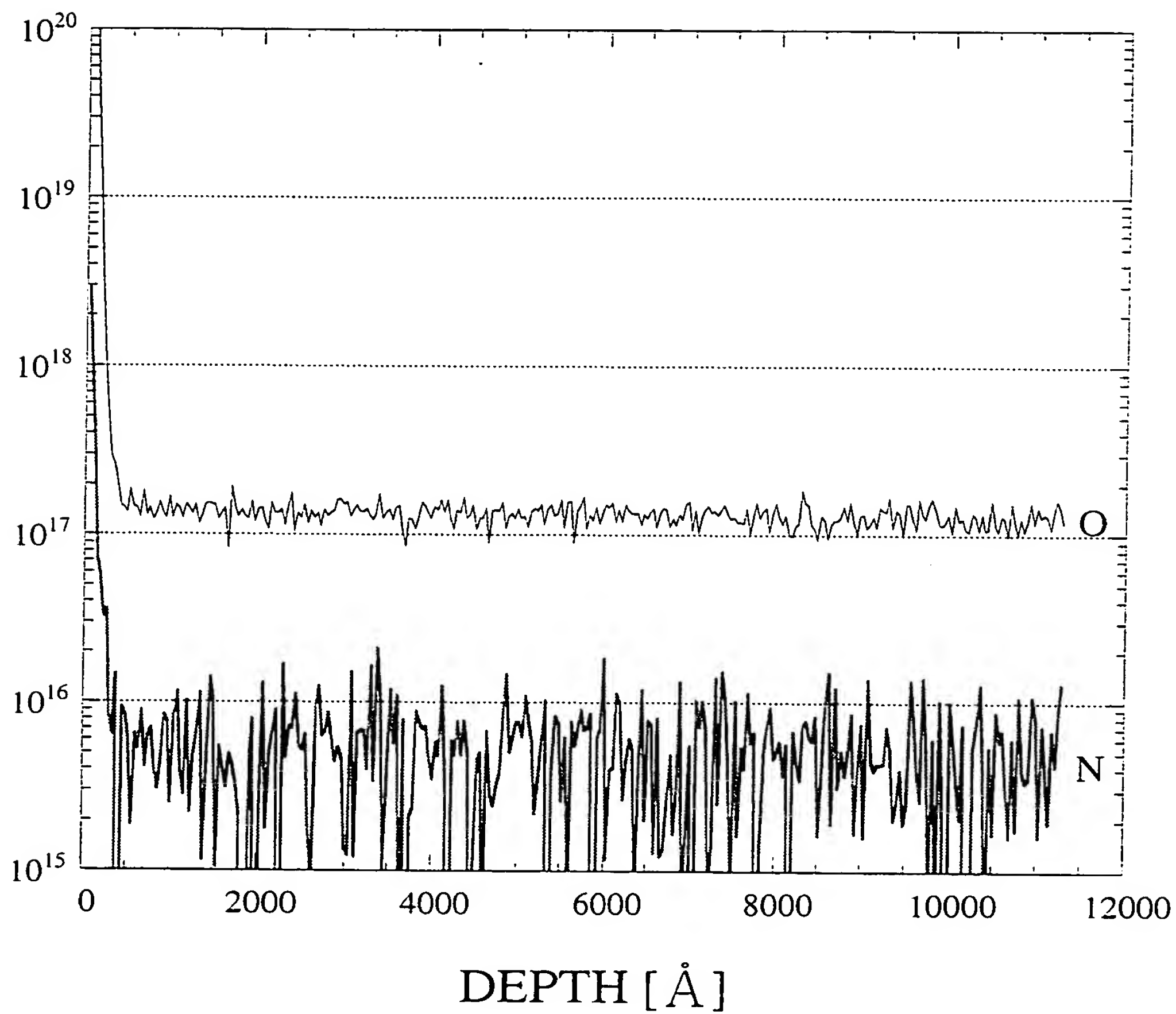
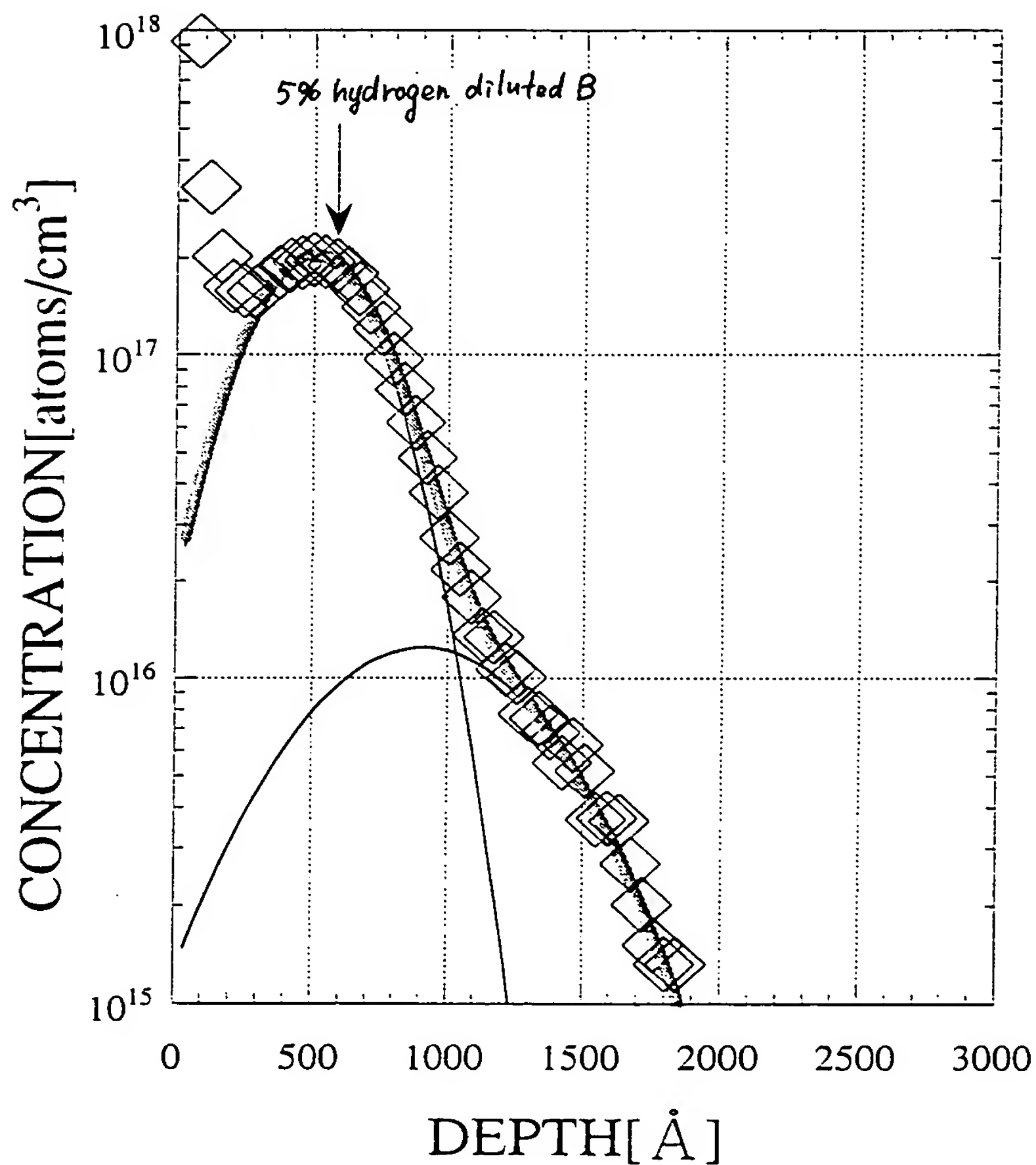
CONCENTRATION[atoms/cm<sup>3</sup>]

Fig. 28

TOP SECRET

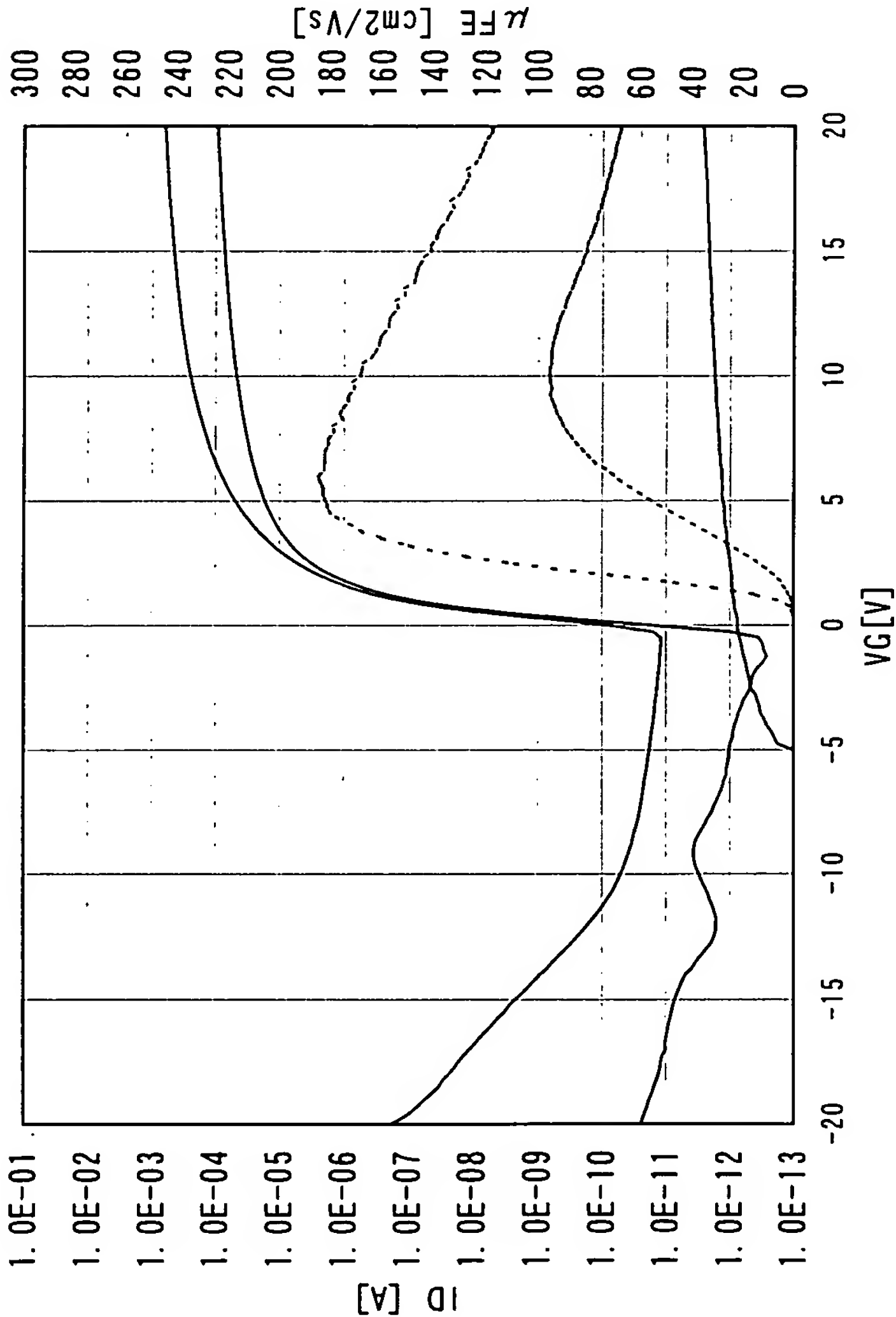


	5% B fitting
	value
dosage 1	1.1224e+12
dosage 2	1.3183e+11
standard deviation 1	227.08
standard deviation 2	422.75
projected range 1	494.37
projected range 2	908.19
$\chi^2$	0.52998
R	1

Gaussian function fitting  
 projected range of B at 30kV (Å)  
 LSS calculation (into Si or SiO<sub>2</sub>)  
 B<sup>+</sup> : ~ 1000 Å  
 B<sub>2</sub><sup>+</sup> : ~ 500 Å

Fig. 29

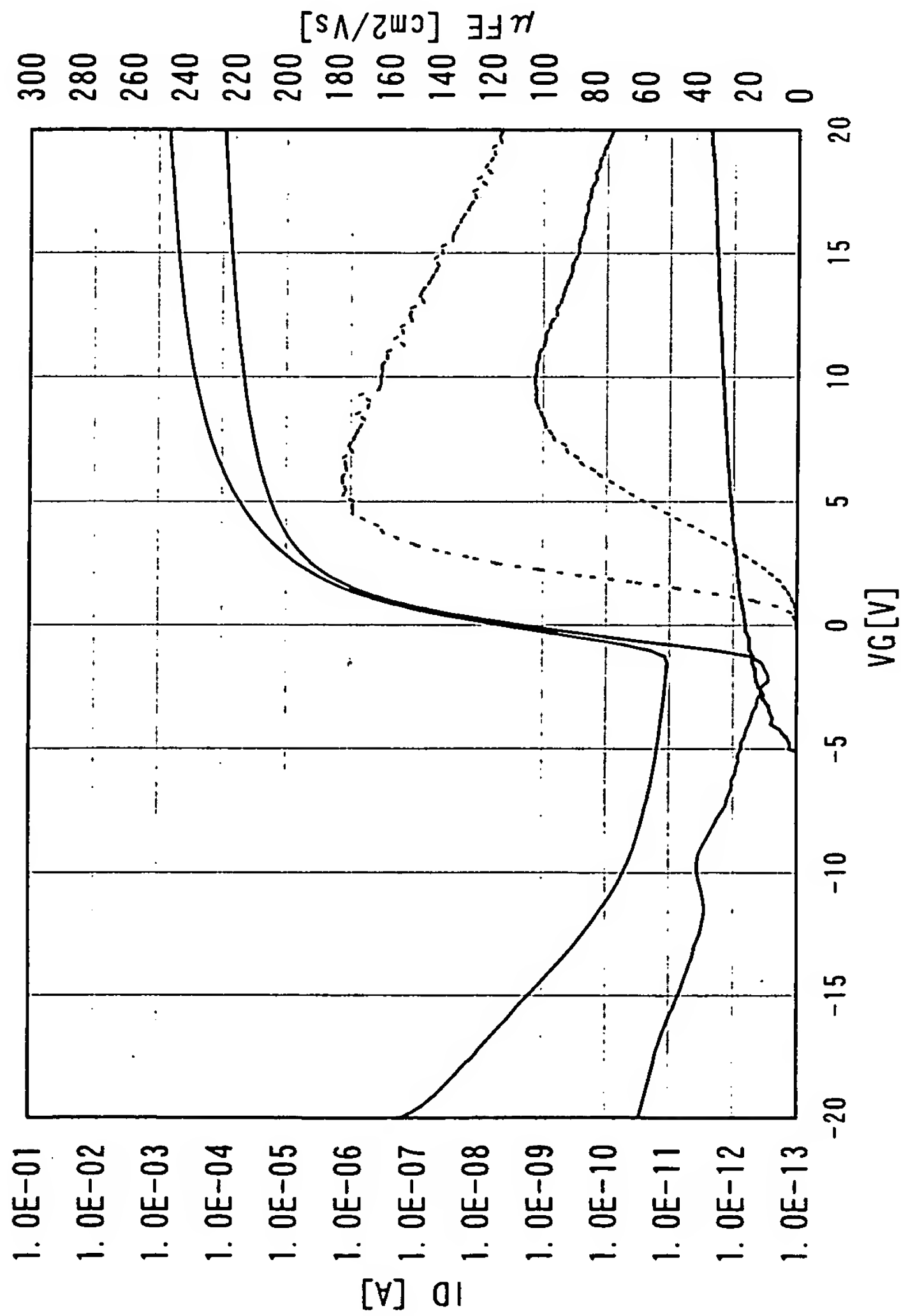
(N-ch, L/W= 7.1/ 7.5, Tox= 115)



parameter		
channel type		N
kind of TFT		A
value of L [um]		7.1
value of W [um]		7.5
dielectric constant		4.1
thickness of oxide film [nm]		115
results		
Ion_2 [A]		2.44E-04
Ioff_2 [A]		1.70E-11
Shift_1[V]		-0.231
Vth [V]		1.430
S-value [V/dec]		0.201
μFE(max) [cm2/Vs]		185.2

Fig. 30

(N-ch, L/W= 7.1/ 7.5, Tox= 115)



parameters		
channel type		N
kind of TFT		A
value of L [um]		7.1
value of W [um]		7.5
dielectric constant		4.1
thickness of oxide film [nm]		115
results		
Ion_2 [A]		2.65E-04
Ioff_2 [A]		1.43E-11
Shift_1[V]		-1.086
Vth [V]		1.361
S-value [V/dec]		0.308
$\mu_{FE(max)}$ [cm <sup>2</sup> /Vs]		178.5

Fig. 31